

Monthly Performance Report

August 2016

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 12:24 pm, Sep 26, 2016

Release Approval

Date

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J. A. Ciucci
President and Chief
Executive Officer

Monthly Performance Report

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August 2016
CHPRC-2016-08, Revision 0

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EXECUTIVE SUMMARY

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

- The River Corridor Closure Contract (RCCC) scope transitioned to CHPRC in August with approximately 300 new team members joining CHPRC to support the transitioning Environmental Restoration Disposal Facility (ERDF) and 618-10 Burial Ground scope.
- The Plutonium Finishing Plant (PFP) Closure Project began electrical isolations of the Plutonium Reclamation Facility (PRF) and made significant progress in removing large pieces of contaminated ventilation duct from the duct level using large access doors to allow direct loading of the waste. The PRF declared criticality incredible for the first time since operations began in 1964. This represents a significant removal of nuclear material from the facility in preparation for demolition. The project also completed the Hazard Review Board (HRB) for the PRF demolition work package, the PFP Demolition Readiness Assessment began on Monday, August 22, and the ancillary building 2729-Z (warehouse) was demolished.
- The Waste and Fuels Management Project (W&FMP) completed the first core drilling between F and E cells as part of the Waste Encapsulation and Storage Facility (WESF) legacy contamination stabilization effort. The project also completed the interlock functional test of the new ventilation upgrades as part of the operation acceptance testing. Workers completed the final installation of the new high efficiency particulate air (HEPA) filters in support of ventilation modifications at the WESF. Grouting to stabilize legacy contamination in WESF hot cells also began.
- The Soil and Groundwater Remediation Project (S&GRP) obtained agency approval of the 200-SW-2 Operable Unit (OU) Revision 0 RI/FS Work Plan. CHPRC will work closely with RL to initiate planning activities on characterization efforts. CHPRC initiated Decontamination and Decommissioning (D&D) efforts at the 100 NR 2 Pump and Treat (P&T) Facility. Removal of this facility will be complete in October and will support cleanup of the 100 Area. The project obtained



A close up shot of the last Entry into PRF Canyon to Paint the Last of the Canyon.



WESF Core Drilling Between Hot Cells E and F.

formal Environmental Protection Agency approval to end soil vapor extraction rebound testing. This signals the successful removal of contamination to levels above cleanup standards in support of the Record of Decision.

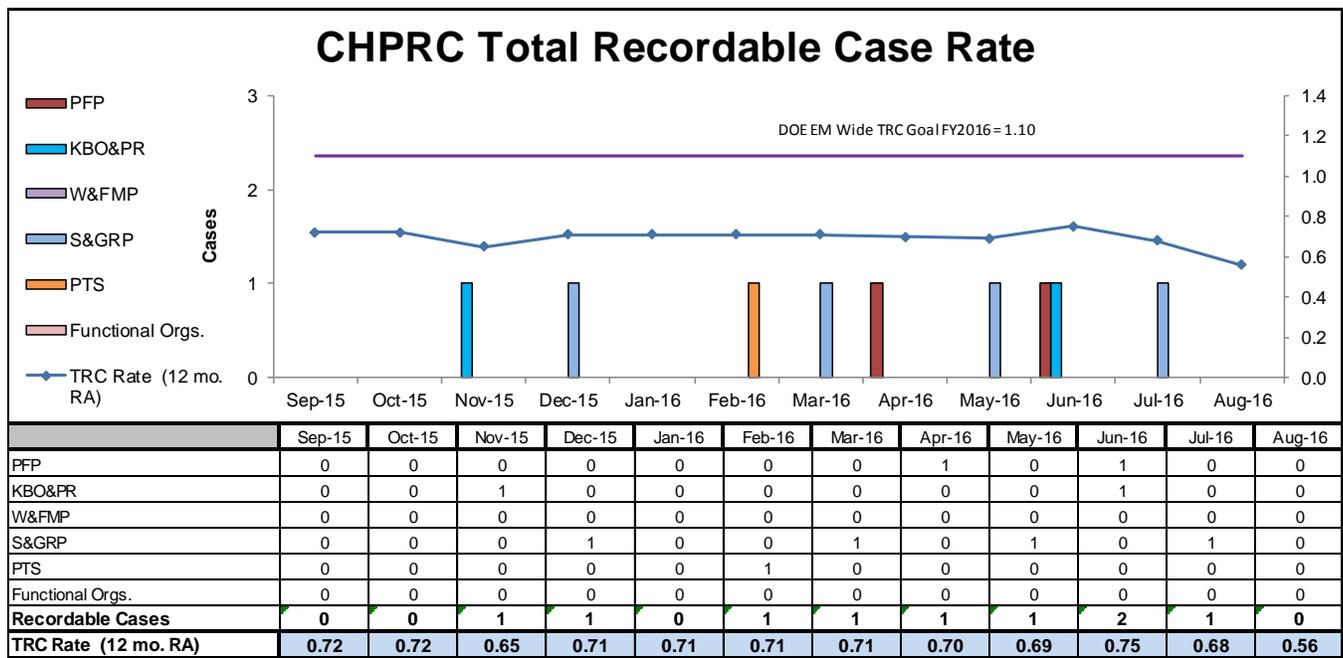
- The K Basin Operations and Plateau Remediation (KBO&PR) Project completed eight of the nine Sludge Treatment Project (STP) Performance Measures. The current forecast date for Authorization to Commence Retrieval Operations is mid to late 2018. Workers on the STP at the Maintenance Storage Facility (MASF) officially declared victory on MASF pre-operational acceptance testing.
-
- The August 2016 President's Zero Accident Council (PZAC) meeting was hosted by the Project Technical Services (PTS). The three main ideas for the meeting were:
 - Mission HASN'T changed: Protecting the People.
 - Threat HAS changed: External Then, Internal Now.
 - Safety: Then, Now, and the Future.
- o Five "Thinking Target Zero" (TTZ) bulletins were published in August to convey important occupational, safety, health, and environmental messages:
 - Employee safety ownership.
 - Sprains and Strains.
 - Situational Awareness.
 - Recycling Aerosol Cans.
 - Time for Change – Back to School.
- o August *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
 - Five Lessons Learned: National Security Technologies, Nevada National Security Site (NNSS) cement truck did not stop when signaled; Washington River Protection Solutions (WRPS) -- Sunlight on shiny surface caused intense heat and combustion of packing materials; Lawrence Livermore Laboratory -- Verification of protective properties is critical before using any PPE; Consolidated Nuclear Security, Pantex Plant -- Finger laceration requiring stitches; Lawrence Livermore National Laboratory -- safety message on summertime cookouts.
 - Weekly Ethics Moments.
 - Digital eye strain.
 - Vehicle safety reminder.
 - Off-road fire safety reminders.
 - Hazard analysis and planning.
 - Ergonomics process.
 - Hazard communication regarding Occupational Safety and Health Administration's (OSHA) Globally Harmonized System.
 - eBOM users and required approvers.
 - Pre-holiday safety reminder.
- o The August *Kudos Corner* recognized individuals and teams who made a significant contribution to safety at work, home or play:
 - Kudos to two workers in the KBO&PR project for stopping and changing a blown out tire for a co-worker after 5:30 p.m., on the way home from work. They then followed the driver

from 200 East to make sure the employee was able to safely get to a tire store to get the tire fixed.

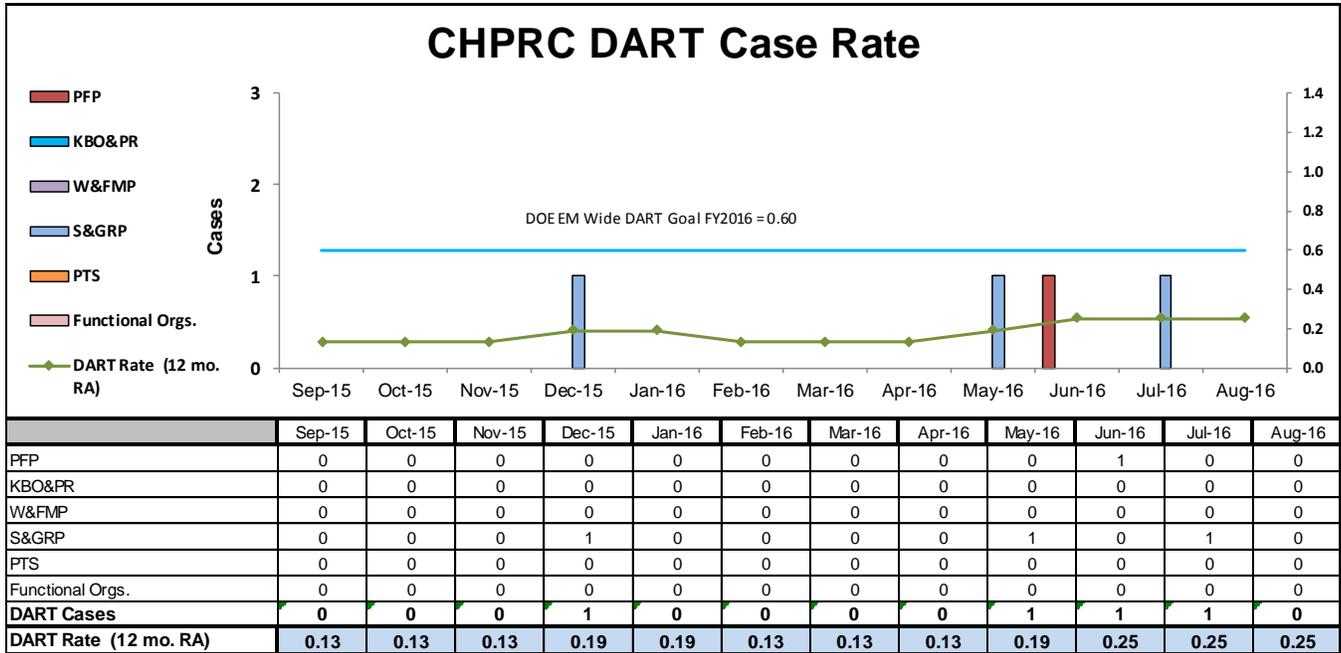
- Kudos to the S&GRP sampling group who reached out to Safety to improve the ergonomics of the tables used by the samplers to package samples. The new ergonomic friendly tables adjust to suit the needs of all the workers who use them.
- Kudos to an Environmental Program and Strategic Planning (EP&SP) employee for reporting a suspicious black box behind a bush at 2420 Stevens Complex. Hanford Patrol and the Richland Police were notified and investigated with the patrol dog. The box was discovered to be a bug box. Good job for seeing and reporting a suspicious object.
- Kudos to the S&GRP employees for initiating an innovative approach to finding, reporting, and mitigating hazards.
- Kudos to the PFP team for safely and compliantly demolishing building 2729-Z on August 23, the latest of the ancillary buildings being demolished to make way for the eventual demolition of PFP itself.

TARGET ZERO PERFORMANCE

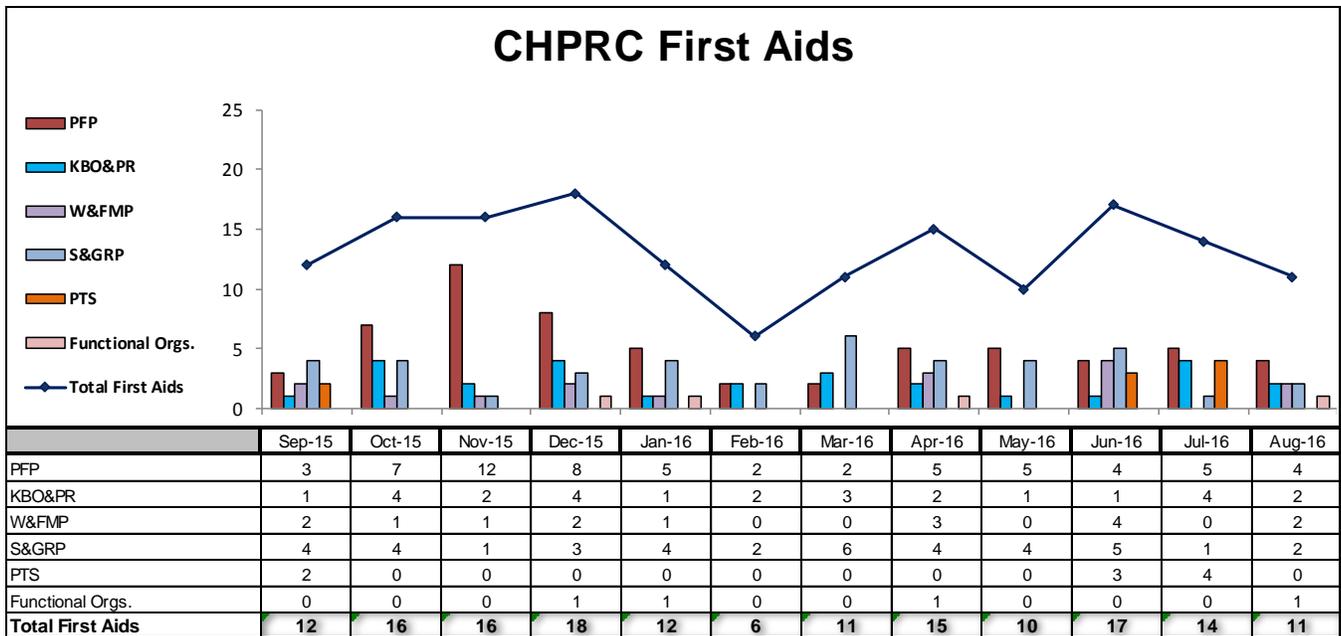
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.56 is based on a total of nine Recordable injuries. There were no Recordable cases for August.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.25 is based upon a total of four Days Away cases. There were no DART cases in August.



First Aid Case Summary: CHPRC reported 11 first aid cases in August. The contributors were five abrasions/bruises/contusions, four sprains/strains/pains, one miscellaneous (burns, rashes, repetitive motion, etc.) and one insect bite.

KEY ACCOMPLISHMENTS

Projects

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

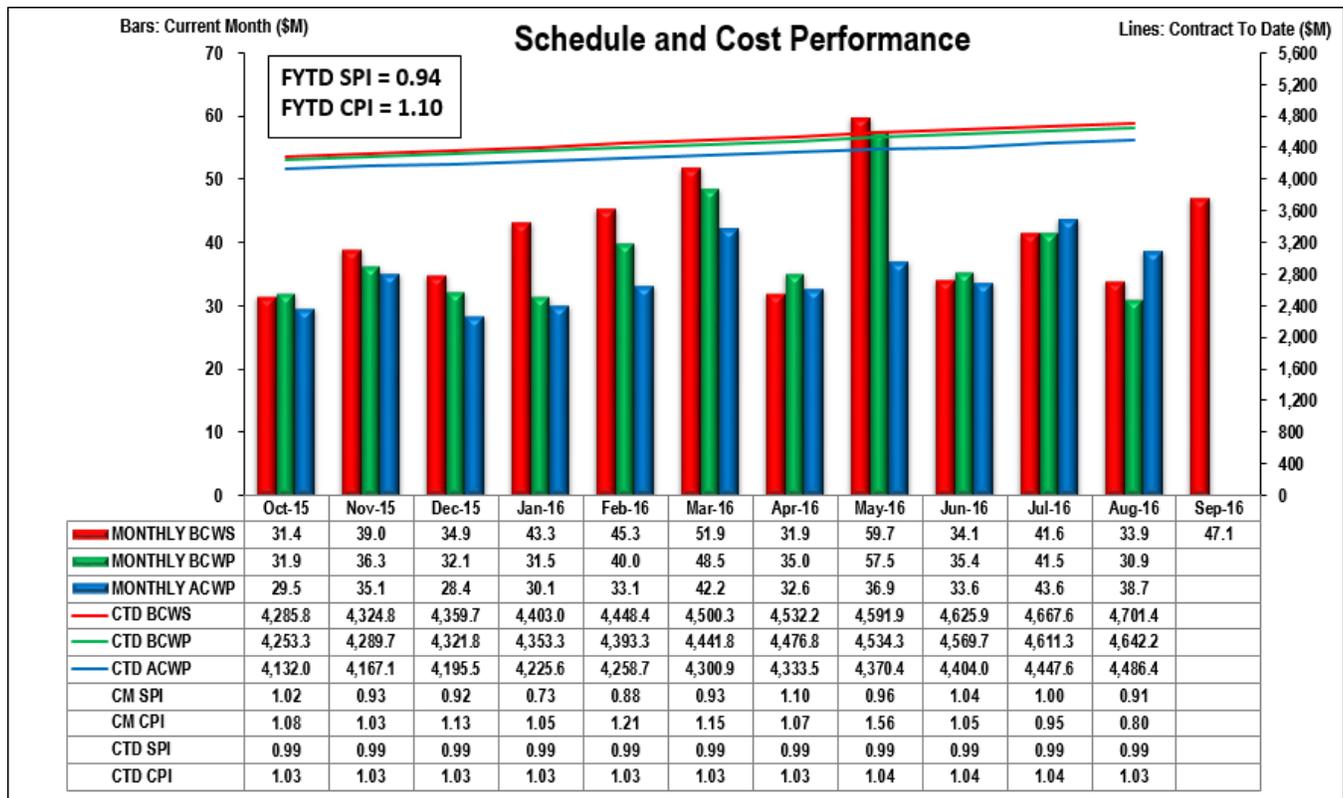
Project Services and Support (PTS)

- 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

Refer to Sections A through G as well as Appendix C of this report for the project specific Major Issues.

EARNED VALUE MANAGEMENT



	SM					SM					SM		
	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	5.5	2.7	9.3	(2.8)	(6.5)	957.3	903.4	933.5	(53.9)	(30.1)	980.4	1,036.4	(56.0)
RL-0012 - SNF Stabilization & Disposition	7.2	6.0	5.5	(1.2)	0.5	613.9	614.6	589.9	0.8	24.7	738.8	712.1	26.6
RL-0013 - Solid Waste Stab & Disposition	8.7	8.9	8.7	0.2	0.2	1078.3	1078.6	1011.5	0.3	67.1	1,342.0	1,285.5	56.5
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	8.7	9.8	10.0	1.2	(0.1)	1271.8	1259.8	1230.7	(12.0)	29.1	1,564.9	1,489.8	75.1
RL-0040 - Nuc Fac D&D - Remainder	2.1	1.8	2.1	(0.3)	(0.2)	422.7	418.9	387.9	(3.8)	31.0	472.5	445.9	26.6
RL-0041 - Nuc Fac D&D - RC Closure Project	1.6	1.4	3.1	(0.1)	(1.7)	335.6	345.0	315.0	9.4	30.0	415.2	366.6	48.6
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.1	(0.0)	0.0	21.9	21.9	17.8	0.0	4.1	26.5	22.8	3.7
Total	33.9	30.9	38.7	(3.0)	(7.8)	4,701.5	4,642.2	4,486.4	(59.3)	155.8	5,540.3	5,359.2	181.1

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

Performance Summary

CHPRC continues to track completion of contract scope within budget and is currently projecting a Variance at Completion of \$181.1 million with \$65.3 million of Management Reserve (MR) for a total positive variance of \$246.4 million. For August, the project was 8.7 percent behind schedule and 25.3 percent over planned cost. Contract to Date (CTD), the project was 1.3 percent behind schedule and 3.4 percent under planned cost.

The current month negative schedule variance is primarily due to Project Breakdown Structure (PBS) RL-0011 delay in progress on discrete demolition activities due to delays in readying the major PFP facilities (236-Z, 242-Z, 291-Z, and 234-5Z) for demolition. Also contributing to the variance is PBS RL-0012 Budgeted Cost of Work Scheduled (BCWS) being recognized for material procurement for Sludge Transport & Storage Container (STSC) vessels 13-24, which was completed ahead of schedule. The BCWS is just now catching up to the Budgeted Cost of Work Planned (BCWP). Also, the relidding workscope completed five months ahead of schedule. The last of the performance was claimed during the period which was minimal as the BCWS comes into the current month window. Another contributor to the schedule variance was implementation of the alternate contracting strategy to start contractor on-site training, in-basin work package preparation, pre-mobilization, ingress / egress and installation of Hose-in-Hose Transfer Line (HIHTL) shielding dog house work ahead of plan due to slip in receipt of In-Basin Equipment for installation. The contractor training at MASF and review of redline drawings following cold commissioning (a risk activity) is behind schedule due to late receipt of In-Basin Equipment for installation. Training at MASF is scheduled to start the beginning of August versus July as planned, but is still anticipated to complete on schedule in mid-August. The variance is partially offset due to PBS RL-0030 positive performance made on the ongoing 200-UP-1 monitoring well drilling campaigns, including recovery of drilling of FY2015 and FY2016 baselined campaigns to support Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-016-193, schedule recovery underway on the M-24 six 100-NR-2 monitoring well campaign planned in FY2015, and in August, scope to drill treatability test wells was re-planned from FY2015 to FY2017/FY2018 to reflect a delay in the start of work until FY2017.

The current month negative cost variance is due to PBS RL-0011 subcontracted labor support costs being higher than planned, consumable materials costing more than planned due to the extended time frame that it is taking to complete discrete field work and more Personal Protective Equipment (PPE) to support implementation of more conservative radiological controls are driving the increased costs for PFP to achieve slab on grade. Also contributing to the variance is PBS RL-0041 performing waste site

remediation activities as authorized by Change Order 307, 100K Area Waste Site Quantity Increase. Actual costs were incurred for performing this scope with no offsetting earned value (-\$1,665K). A Baseline Change Request (BCR) is planned for September 2016 implementation that will add budget associated Change Order (CO) 307.

FUNDING ANALYSIS

FY2016 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2016		Variance
		Projected Funding	Spending Forecast	
Spending Forecast				
RL-0011	Nuclear Materials Stabilization and Disposition	110.7	106.3	4.4
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	53.0	41.4	11.6
RL-0012	15-D-401 Sludge Retrieval Project	68.1	32.2	35.8
RL-0013	Waste and Fuels Management Project	106.7	99.7	7.0
RL-0030	Soil, Groundwater and Vadose Zone Remediation	127.5	118.1	9.3
RL-0040	Nuclear Facility D&D, Remainder of Hanford	26.5	21.6	4.9
RL-0041	Nuclear Facility D&D, River Corridor	40.0	27.3	12.7
RL-0042	Fast Flux Test Facility Closure	3.2	1.8	1.5
Total Spending Forecast		535.6	448.5	87.2
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	0.9	(0.9)
RL-0030	Soil, Groundwater and Vadose Zone Remediation	0.0	0.6	(0.6)
RL-0040	Nuclear Facility D&D, Remainder of Hanford	0.0	0.9	(0.9)
RL-0041	Nuclear Facility D&D, River Corridor	0.0	6.7	(6.7)
Total Non-Contract Work Scope		0.0	9.2	(9.2)
Total Base:				
RL-0011	Nuclear Materials Stabilization and Disposition	110.7	106.3	4.4
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	53.0	41.4	11.6
RL-0012	15-D-401 Sludge Retrieval Project	68.1	32.2	35.8
RL-0013	Waste and Fuels Management Project	106.7	100.6	6.1
RL-0030	Soil, Groundwater and Vadose Zone Remediation	127.5	118.8	8.7
RL-0040	Nuclear Facility D&D, Remainder of Hanford	26.5	22.5	4.0
RL-0041	Nuclear Facility D&D, River Corridor	40.0	34.0	5.9
RL-0042	Fast Flux Test Facility Closure	3.2	1.8	1.5
Total Base:		535.6	457.7	78.0

Funds/Variance Analysis

FY2016 expected funding increased in August for PBS RL-0041 by \$11.3 million, which included the final funding increment for AB Waste Sites and additional funding for RCCC transition. Expected

funding changed from \$524.3 million to \$535.6 million. The Spending Forecast decreased \$8.3 million from last month primarily for work scope not expected to complete this fiscal year, and refined estimates for waste site remediation and RCCC transition scope.

BASELINE CHANGE REQUESTS

In August 2016, CHPRC approved and implemented 23 BCRs into the Performance Measurement Baseline (PMB). Each change request is identified in the table below:

Change Request #	Title	Summary of Change
BCR-000-16-004R0	<i>CO #304, Support Initiation of Transition of River Corridor Contract Scope Activities to PRC</i>	This BCR incorporated Contract Modification (CM) 483, via Correspondence No. 1600610A, issued CO #304, <i>Initiate Transition of River Corridor Contract (RCC) Scope Activities into the Plateau Remediation Contract (PRC)</i> . This CO authorized CHPRC to transition the 324 Building, its ancillary facilities, and waste site 300-296 to CHPRC.
BCR-000-16-005R0	<i>CO #304 Indirect Support to Execution of RCC Scope</i>	This BCR incorporated CM 483, via Correspondence No. 1600610A, issued CO #304, <i>Initiate Transition of River Corridor Contract (RCC) Scope Activities into the Plateau Remediation Contract (PRC)</i> with an authorized Not To Exceed (NTE).
BCR-011C-16-010R0	<i>Revision to Calendars for FY2017 and FY2018 - PFP CAP 1</i>	This BCR implemented revisions to the realized hour's calendar. This BCR does not change the PMB value.
BCR-011C-16-011R0	<i>Revision to Calendars for FY2017 and FY2018 - PFP CAP 2</i>	This BCR implemented revisions to the realized hour's calendar. This BCR increased the PMB value by \$2K.
BCR-011C-16-012R0	<i>PRF Glovebox Removal Change in Approach (PFP C2) MR Draw</i>	This BCR incorporated the revised method of removal of gloveboxes from PRF, this will be an MR draw based on the revised execution strategy. This BCR increased the PMB value by \$1,432K.
BCR-012-16-029R0	<i>Definitization of CO #301 100-KW Sand Filter Media Remediation</i>	This BCR incorporated the definitization of CO #301, 100-KW Sand Filter Media Remediation, as documented in CM 520. This BCR increased the PMB value by \$27K.
BCR-012-16-030R0	<i>Definitization of CO 300 - 100KW Garnet Filter Remediation</i>	This BCR incorporated the definitization of CO #300, 100-KW Garnet Filter Media Remediation, as documented in CM 522. This BCR increased the PMB value by \$298K.
BCR-012C-16-028R0	<i>Revision to Calendars for FY2017 and FY2018 - STP CAP</i>	This BCR incorporated the definitization of CO #269, WESF K3 Ventilation and Stabilization Project, as documented in CM 525. This BCR does not change the PMB value.
BCR-013-16-027R0	<i>RL-0013 Incorporation of Schedule Health Modifications to IMS</i>	This BCR revised the RL-0013 schedule to more closely align with schedule health as defined by DOE Earned Value Management System Interpretation Handbook (EVMSIH) schedule health metrics. This BCR does not change the PMB value.
BCR-013-16-028R0	<i>Definitization of CO #269, WESF K3 Ventilation and Stabilization</i>	This BCR modified the PMB to align with the definitization of CO 269, WESF K3 Ventilation and Stabilization, which is documented in CM 525 received for Correspondence No. 1603456. This BCR increased the PMB value by \$6,047K.
BCR-013C-16-029R0	<i>Convert Project Mgmt Scope for W135 Planning Packages to Work Packages</i>	This BCR defined the detailed planning for two planning packages for the FY2017 Project W-135, Management of the Cesium and Strontium Capsules Project Management scope. This BCR does not change the PMB value.

Change Request #	Title	Summary of Change
BCR-030-16-038R0	<i>Revise Method of Performance for Composite Analysis Activities</i>	This BCR re-planned the remaining discrete components of Composite Analysis for FY2017 and FY2018 and separates the Level of Effort (LOE) scope from discrete scope. This BCR does not change the PMB value.
BCR-030-16-039R0	<i>Consolidate Perched Water Annual Report and Project Management Activities</i>	This BCR consolidated the scope and budget associated with preparation of the Perched Water Annual Report from Work Breakdown Structure (WBS) element 030.33.07.01.07, <i>Perched Water Annual Report</i> , into WBS element 030.06.07.01.02.03, <i>Reporting – 200 Area Annual Report</i> , for work scope planned in FY2017 and FY2018. This BCR does not change the PMB value.
BCR-030-16-040R0	<i>Definitization of CO #303 BC-5 AWLN</i>	This BCR incorporated the definitization of CO #303, 100-BC-5 Automated Water Level Network, as documented in CM 523. This BCR increased the PMB value by \$108K.
BCR-030-16-041R0	<i>Defer Unfunded Work Activity from FY2017 to FY2018</i>	This BCR re-planned the FY2017 B Plant Project Management task. Based on the multi-year integrated priority list and FY2017 funding projections, funding for B Plant Project Management scope will not be available in FY2017. This BCR does not change the PMB value.
BCR-030-16-042R0	<i>Re-Plan PBS 030 PM Activities to Address EVM Co-Mingling</i>	This BCR re-planned RL-0030 Project Management (PM) activities to eliminate co-mingling of LOE and discrete scope at the work package level. This BCR does not change the PMB value.
BCR-030-16-043R0	<i>Defer Unfunded 200-DV-1 Treatability Test Well-Drilling</i>	This BCR deferred 200-DV-1 Well Drilling to correspond with Treatability Test Work Activities previously deferred in BCR-030-16-037R0. This BCR does not change the PMB value.
BCR-041C-16-020R0	<i>Revision to Calendars for FY2017 and FY2018 - RL-0041</i>	This BCR implemented revisions to the realized hour's calendar. This BCR does not change the PMB value.
BCR-041C-16-022R0	<i>Defer Unfunded Work Activity for 100K Zone Closure</i>	This BCR re-planned the FY2017 100K Zone Closure FY2012 and 100K Zone Closure FY2013 (Deferred) oversight tasks. This BCR does not change the PMB value.
BCR-PRC-16-048R0	<i>Revision to Calendars for FY2017 and FY2018 - Operations</i>	This BCR implemented revisions to the realized hour's calendar. This BCR increased the PMB value by \$2K.
BCRA-PRC-16-049R0	<i>HPIC Updates August 2016</i>	This BCR documents Hanford Programs Integrated Control Module (HPIC) changes made in August 2016, these changes include new work packages and Control Account Manager (CAM) changes. This BCR does not change the PMB value.

The Allocated (Distributed) Budget increased by \$7,915K.

Undistributed Budget Activity

BCR Number	Title	Fiscal Year	UB
BCR-041C-16-023R0	<i>PBS RL-0041 Undistributed Budget Adjustments August 2016</i>	2015 - 2018	\$ 2,000K
BCR-PRC-16-050R0	<i>Undistributed Budget Adjustments August 2016</i>	2015 - 2018	\$ 4,200K

The Undistributed Budget increased by \$6,200K for an overall increase to the PMB of \$14,115K during August.

Management Reserve Activity

BCR Number	Title	Fiscal Year	MR
BCR-011C-16-011R0	<i>Revision to Calendars for FY2017 and FY2018 - PFP CAP 2</i>	2015 - 2018	\$-2K
BCR-011C-16-012R0	<i>PRF Glovebox Removal Change in Approach (PFP C2) MR Draw</i>	2015 - 2018	\$-1,432K
BCR-012C-16-028R0	<i>Revision to Calendars for FY2017 and FY2018 - STP CAP</i>	2015 - 2018	\$-0.3K
BCR-030-16-040R0	<i>Definitization of CO #303 BC-5 AWLN</i>	2015 - 2018	\$6K
BCR-PRC-16-048R0	<i>Revision to Calendars for FY2017 and FY2018 - Operations</i>	2015 - 2018	\$-2K

Overall, there was a decrease in Management Reserve (MR) of \$1,430 during August.

Fee Activity

BCR Number	Title	Fiscal Year	Fee
BCR-012-16-029R0	<i>Definitization of CO #301 100-KW Sand Filter Media Remediation</i>	2015 - 2018	\$8K
BCR-012-16-030R0	<i>Definitization of CO 300 - 100KW Garnet Filter Remediation</i>	2015 - 2018	\$50K
BCR-013-16-028R0	<i>Definitization of CO #269, WESF K3 Ventilation and Stabilization</i>	2015 - 2018	\$575K
BCR-030-16-040R0	<i>Definitization of CO #303 BC-5 AWLN</i>	2015 - 2018	\$6K

Overall, there was an increase in Fee of \$639K during August.

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 fiscal year. The PMB values of change requests are summarized by fiscal year in the tables below (dollars in thousands):

August 2016 Summary of Changes

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
July 2016 Estimate									
PMB	3,391,477	391,653	471,323	488,734	422,505	360,507	2,134,721	5,526,198	5,526,198
MR	0	0	0	24,740	23,559	18,396	66,696	66,696	66,696
Fee	155,504	14,325	14,501	27,303	10,321	18,636	85,085	240,589	240,589
Total	3,546,981	405,978	485,824	540,777	456,385	397,539	2,286,503	5,833,483	5,833,483
August 2016 Change									
PMB									
Change to PMB	0	0	0	5,416	7,331	1,368	14,115	14,115	14,115
MR									
Change to MR	0	0	0	-988	-444	2	-1,430	-1,430	-1,430
Fee									
Change to Fee	0	0	0	499	140	0	639	639	639
Total Change	0	0	0	4,927	7,027	1,370	13,324	13,324	13,324
August 2016 Estimate									
PMB	3,391,477	391,653	471,323	494,150	429,835	361,875	2,148,836	5,540,313	5,540,313
MR	0	0	0	23,752	23,116	18,398	65,266	65,266	65,266
Fee	155,504	14,325	14,501	27,801	10,461	18,636	85,724	241,228	241,228
Total	3,546,981	405,978	485,824	545,703	463,412	398,909	2,299,827	5,846,807	5,846,807

Changes to/Utilization of Management Reserve in August 2016

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
July 2016 MR Totals								
RL-0011	0	0	0	4,031	3,821	0	7,852	7,852
RL-0012	0	0	0	10	8,025	4,712	12,747	12,747
RL-0013	0	0	0	8,072	1,716	2,668	12,457	12,457
RL-0030	0	0	0	6,669	6,073	3,220	15,962	15,962
RL-0040	0	0	0	1,815	941	682	3,438	3,438
RL-0041	0	0	0	4,096	2,800	7,000	13,896	13,896
RL-0042	0	0	0	47	184	113	344	344
Total	0	0	0	24,741	23,559	18,396	66,696	66,696
August 2016 MR Changes/Utilization								
RL-0011	0	0	0	-987	-447	0	-1,434	-1,434
RL-0012	0	0	0	0	0	0	0	0
RL-0013	0	0	0	-1	0	0	-1	-1
RL-0030	0	0	0	0	3	2	5	5
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	0	0	0	0
RL-0042	0	0	0	0	0	0	0	0
Total	0	0	0	-988	-444	2	-1,430	-1,430
August 2016 MR Totals								
RL-0011	0	0	0	3,044	3,374	0	6,419	6,419
RL-0012	0	0	0	10	8,025	4,712	12,747	12,747
RL-0013	0	0	0	8,071	1,716	2,668	12,456	12,456
RL-0030	0	0	0	6,669	6,076	3,222	15,967	15,967
RL-0040	0	0	0	1,815	941	682	3,438	3,438
RL-0041	0	0	0	4,096	2,800	7,000	13,896	13,896
RL-0042	0	0	0	47	184	113	344	344
Total	0	0	0	23,752	23,116	18,398	65,266	65,266

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 FY18	
10/1/2008 -8/31/2016				Planned Subcontracting:	\$2,564,285,972
Reporting Category				Contract-to-date awards:	\$2,401,527,577
	\$ Value	%	Goal %	Bal remaining to award:	\$162,758,395
				Goal award\$	Bal to Goal
SB	\$1,287,465,236	53.61%	49.3%	\$1,264,192,984	-\$23,272,252
SDB	\$222,732,489	9.27%	8.2%	\$210,271,450	-\$12,461,040
SWOB	\$252,982,855	10.53%	7.5%	\$192,321,448	-\$60,661,407
HUB	\$50,550,640	2.10%	2.2%	\$56,414,291	\$5,863,651
VOSB	\$170,219,812	7.09%	3.5%	\$89,750,009	-\$80,469,803
SDVO	\$93,970,345	3.91%	1.3%	\$33,335,718	-\$60,634,627
NAB	\$46,466,268	1.93%	N/A	PRC clause H.20 small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
Large	\$624,459,874	26.00%	N/A		
GOVT	\$2,494,251	0.10%	N/A		
GOVT CONT	\$482,866,522	20.11%	N/A		
EDUCATION	\$104,698	0.00%	N/A	CHPRC Contract Value:	\$5,732,255,464
NONPROFIT_	\$3,763,808	0.16%	N/A	17% rqmt:	\$974,483,429
FOREIGN	\$373,187	0.02%	N/A	SB actual:	\$1,287,465,236
Total	\$2,401,527,577	100.00%	N/A	Bal to rqmt	-\$312,981,807

Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.4 billion in goods and services with over 53 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 six percent of the remaining expenditures arising from P-Card purchases and three 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	<p>PBS-11, Plutonium Finishing Plant Closure Project</p> <p>PBS-13, Solid and Liquid Waste Treatment and Disposal</p>	<p>Offsite Transportation of Radioactive Material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford site and Permafix Northwest (PFNW) locations. RL is the authorized shipper and acts as signatory on the shipping papers, and ensures DOE Manual 460.2-1 is complied with. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) level VI vehicle inspections and verifies that the government drivers meet the applicable Department of Transportation (DOT) Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or Transportation Safety Document (TSD) requirements.</p>	Ongoing
J.12/C.2.3.6	PBS-13, Transuranic Waste Certification	<p>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.</p>	No WIPP shipments are planned within the Contract period of performance.

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



T. E. Bratvold
Vice President for
PFP Closure Project

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The removal of plutonium-contaminated process equipment continued with a particular focus on removing gloveboxes, associated piping, and ductwork. The total number of gloveboxes removed to date is at 99 percent complete.

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

Significant accomplishments in August included:

- Demolished the 2729-Z building.
- Continued 236-Z PRF Canyon clean-up, characterization and painting.
- Completed fixative application to the First Floor West and Second Floor West 236-Z PRF Gallery Gloveboxes.
- Readied First West and First East Gallery Gloveboxes for Demo (removed from E4 ventilation)
- Transported, assembled and erected Link Belt 518 crane for 236-Z PRF Miscellaneous Treatment Glovebox and Column Glovebox removal.
- Continued 236-Z PRF Filter Box separations and E-3/E-4 Exhaust Duct disposition.
- Filled 236-Z PRF below-grade cross-over exhaust duct sumps with concrete.
- Abated 50 feet of asbestos.
- Removed or dispositioned in place 69 feet of process vacuum piping.
- Shipped 27m³ TRU/TRU-M Waste.
- Shipped 119m³ LLW/MLLW.

Key Metrics

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
Glovebox/ Hood Removed or Dispositioned in Place	2	230 gloveboxes/hoods
KPP Rooms/Areas Ready for Demo	-	60 rooms/areas
Asbestos/ACM Removed	50	26,226 feet
Process Vacuum Piping Dispositioned	69	4,947 feet
COMPLETE Process Transfer Line Dispositioned	-	1,525 feet
COMPLETE Pencil Tank Units Removed (Shipped)	-	196 pencil tank units
Buildings Ready for Demo	-	46 structures
Buildings Demolished or Removed	1	46 structures
Non-radioactive Waste Shipped	-	73 m ³
TRU/TRU-M Shipped	27m ³	2,216 m ³
LLW/MLLW Shipped	119m ³	7,307 m ³

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.	1. Issue report documenting thorough inspection of 236-Z	08/16/16	100%
			2. Issue report documenting thorough inspection of 242-Z	05/26/16	100%
			3. Issue report documenting thorough inspection of 234-5Z	01/26/17	20%
			4. Issue report documenting thorough inspection of 291-Z	01/31/17	0%
16-EMS-PFP-OB1-T2	Minimize emissions resulting from demolition of 234-5Z, 236-Z, 242-Z, and 291-Z.	Develop an air dispersion model that will guide the D4 processes to keep radiological emissions as low as reasonably achievable below the regulatory limit of 10 mrem/year.	5. Issue air dispersion modeling report	12/31/15	100%

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	4	63	<ul style="list-style-type: none"> • 8/6/2016 - Employee cut into a heat pump line and was sprayed by liquid. The splash resulted in the employee receiving a minor chemical burn to the right temple area of his face as well as a small amount of liquid entering the inner right ear. Employee was treated and released to work with no restriction. (24083) • 8/9/2016 - Employee reported that while performing RCT duties in room 111, employee went to run around and felt a slight pull in left calf. The employee reported it to the supervisor and was taken to HPMC. The employee was released to work without restriction. (24090) • 8/17/2016 - Employee reported measuring a nut to find the appropriate wrench. As employee was measuring, employee scraped the left forearm across a 2x6 piece of wood. Employee reported scrape to the supervisor. Notifications were made to the shift office, who notified Safety and RadCon. The employee was then sent to HPMC as a precaution, where employee was treated and released to work without restriction. (24096) • 8/27/2016 – Employee rolled right ankle and fell to the floor. Employee had pain around the ankle and up to knee. Shift Office was notified and employee was taken to Physician Immediate Care for evaluation and treatment and was given splint to support ankle. Employee reported to HPMC where evaluations were done and returned to work with a restriction to continue to use the right ankle brace. (24101)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments

234-5Z

- Duct Level:
 - o Abated 50 feet of asbestos.
 - o Removed or dispositioned in place 69 feet of process vacuum piping.
- First Floor
 - o Size Reduced and Loaded out HC-6 Pencil Tanks.

PFP Waste Operations

- Shipped 27m³ TRU/TRU-M waste.
- Shipped 119m³ LLW/MLLW.

236-Z PRF

- Continued Canyon clean-up, characterization and painting.
- Completed fixative application to the First Floor West and Second Floor West Gallery Gloveboxes.
- Transported, assembled and erected Link Belt 518 crane for Miscellaneous Treatment Glovebox and Column Glovebox removal.
- Continued 236-Z PRF Filter Box separations and E-3/E-4 Exhaust Duct disposition.
- Filled 236-Z PRF below-grade cross-over exhaust duct sumps with concrete.
- Isolated compressed air to PRF.

PFP Building Demolition

- Demolished 2729-Z ancillary building.

PTS Accomplishments

- N/A

MAJOR ISSUES

Issue:

Clipping a Live Wire (Inadvertently cutting an energized conductor while performing electrical isolations to four, five, and six floor of PRF).

Corrective Action:

- Take PRF electrically Cold and Dark per PRC-PRO-WKM-53080 *CHPRC Cold and Dark Process*.
- Revise Work Packages 2Z-15-01466, PFP Minor Electrical Work and 2Z- to ensure wires will be individually verified terminated prior to any cutting activity. (September 15, 2016)
- Write a Lessons Learned to provide information of this event. (October 18, 2016)
- Field Work Supervisor (FWS) will hold a briefing with all PFP electricians to review the outcome of this event. (September 15, 2016)

Status:

- Field work being performed to install temporary power and electrically air gap PRF.

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 to the monthly spotlight chart in the month of August .													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No realized risks identified for RL-0011 in the month of August .													
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)													
PFP-092-02: Final Facility Characterization Identifies Unexpected Hold-up	Unexpected or late discovery of radiological (Pu) or chemical (Asbestos) holdup requiring added facility deactivation. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$190K, 16 days	●	↑	Risk Trigger: Will continue throughout project lifecycle until Demolition activities commence. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <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>Revise the project DQO to incorporate provisions to leave for demolition higher residual levels of contamination when supported by the air dispersion model and waste operations</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Complete 234-SZ Duct Level and backside inspections to identify piping with TSI dropping through to the first floor ceiling void.</td> <td style="text-align: center;">09/29/16</td> <td style="text-align: center;">95</td> </tr> </tbody> </table> Mitigation Assessment: The risk component associated with final characterization of the PRF canyon, gallery gloveboxes, and strongbacks has been reduced . Final characterization of canyon walls and strongbacks now demonstrates that no further decontamination/removal is required. The Data Quality Objective (DQO) revision to recognize added source terms is also complete. With respect to TSI inspections, three inspections remain in void areas; however, based on Engineering support, there is no expectation that additional TSI will be identified beyond that already known to prevail. Project focus now is placed on D&D crews opening up walls to create access to piping suspected to carry TSI. Given the sufficient lead time, there is greater confidence that the added work can be completed by existing insulator crew strength assigned to support the project. In this regard, the work has been incorporated into the Estimate To Complete (ETC). No alternative course of actions needed at this time.	Mitigation action(s)	FC Date	%	Revise the project DQO to incorporate provisions to leave for demolition higher residual levels of contamination when supported by the air dispersion model and waste operations	Complete	100	Complete 234-SZ Duct Level and backside inspections to identify piping with TSI dropping through to the first floor ceiling void.	09/29/16	95
Mitigation action(s)	FC Date	%											
Revise the project DQO to incorporate provisions to leave for demolition higher residual levels of contamination when supported by the air dispersion model and waste operations	Complete	100											
Complete 234-SZ Duct Level and backside inspections to identify piping with TSI dropping through to the first floor ceiling void.	09/29/16	95											
FY2016 Risk Triggers (Risk could be realized in FY2016)													
PFP-DEMO-02: Air Modeling Increases Equipment Removal/Decontamination for Demo	Air Dispersion identified additional MAR reduction higher than planned or RL directs constrains from Revision 12 SER, resulting in additional decontamination/fixatives and equipment removal prior to initiating open-air demolition resulting in schedule delays. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$0, 12 days *Cost increase will result in cost per day impacts from crews, and hotel load.	●	↑	Risk Trigger: July 6, 2015 <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <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>Process Revision 3 to the PNNL Air Dispersion Model</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> Mitigation Assessment: Revision 3 to the PNNL Air Dispersion Model was completed to support the project demolition readiness assessment. Latest results demonstrate that no additional MAR reduction is necessary in the PRF. When final facility characterization results are incorporated into a subsequent planned revision for the demolition phase, modeled results will further demonstrate that radiological boundaries can be maintained within the planned demolition perimeter. With the mitigation actions complete this risk was re-evaluated and no longer qualifies as a key project risk. It will be removed from next month's spotlight report. The project will continue to track this risk until it no longer poses a threat.	Mitigation action(s)	FC Date	%	Process Revision 3 to the PNNL Air Dispersion Model	Complete	100	Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.	Complete	100
Mitigation action(s)	FC Date	%											
Process Revision 3 to the PNNL Air Dispersion Model	Complete	100											
Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.	Complete	100											

High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)No high threat valued risks identified in the month of **August****Unassigned Risks** (Pending ownership of identified risks/opportunities)No unassigned risks identified in the month of **August**.

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	5.5	2.7	9.3	(2.8)	-50.2%	(6.5)	-238.6%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (-\$2.8M/-50.2%)

The current month negative schedule variance is due to work scope associated with the demolition of 234-5Z and 291-Z not being performed as originally scheduled. The demolition of these facilities has been delayed due to resources being redirected to support ready for demolition activities associated with 236-Z and 234-5Z (other project critical path work). Once the buildings are closer to being ready for demo and the resources are available, demolition of the remaining ancillary buildings will occur leading to the start of demolition of 236-Z. This is partially offset by demolition of ancillary building, 2729-Z in fiscal August, with 2727-Z scheduled for demolition in fiscal September. The first major facility scheduled for demolition, 236-Z, is not set to begin until October 2016.

CM Cost Variance: (-\$6.5M/-238.6%)

The current month negative cost variance is primarily the result of contracted labor support while preparing to demolish PFP facilities and support during demolition of PFP. Mission Support Alliance (MSA) fleet services and motor carriers services along with equipment rental required for demolition support account for the costs. With minimal demolition performed on ancillary buildings, MSA contract (i.e., Heavy Equipment Operators, Crane Operators, etc.) costs are causing the variance. In addition, labor support costs being higher than planned due to the extension of the field work completion date. This is a result of impacts from the discrete work scope falling behind schedule. Consumable materials are costing more than planned due to the extended time frame to complete discrete field work and additional PPE requirements. In addition, more Personal Protective Equipment (PAPRs, SCBA, etc.) to support implementation of more stringent radiological controls requirements are driving the increased costs. MSA support services are costing more than originally planned because the discrete field work is taking longer to complete. In addition, the delay in completion of the PFP Project to achieve slab on grade, is causing a needed extension of Min-Safe resources to maintain the facility in a safe and compliant manner until the facility becomes demolition ready. Also contributing to the negative cost variance is assignment of extra teams to PRF to terminate safeguards, apply fixative to the canyon, remove E3/E4 ducting, and remove filter boxes to support the ready for demolition milestone. In addition, extra characterization efforts have been required to terminate safeguards.

Contract-to-Date (\$M)

WBS 011/ RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	957.3	903.4	933.5	(53.9)	-5.6%	(30.1)	-3.3%	980.4	1,036.4	(56.0)

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Variance (-\$53.9M/-5.6%)

The CTD schedule variance relates to the progress on discrete D&D work scope (apportioned). Re-sequencing of D&D discrete work to align with availability of D&D workers caused a delay in start of work on 242-Z activities. Also contributing to the variance, the 234-5Z Backside Rooms team was assigned to higher priority work scope associated with unplanned door modifications, which supported the in-situ size reduction efforts on the HC-9B and HA-9A Gloveboxes located in 234-5Z. Delays have been caused by Stop Works on discrete D&D work associated with Beryllium, tight fitting masks, demister, weather (heat), PremAire breathing air systems and suits, chemical smells, contamination cleanup efforts as a result of a malfunctioning criticality alarm system, and radiological events. Also, duct level characterization, process vacuum, transfer and drain line teams were previously assigned to perform other critical path work in the 236-Z PRF, 242-Z Americium Facility, and RMA/RMC KPP glovebox removal work efforts. As a result of this realignment of plant priorities and changing approach (area vs. system) to performing work within the balance of 234-5Z, characterization, and process equipment (e.g., ducting, piping, filter box etc.) removal is lagging. In addition, progress on the D&D project management Work Breakdown Structure (WBS) element is apportioned to the discrete D&D work scope and contributes to this variance. Impacts have also been recognized resulting from a chemical reaction when working on the PRF canyon floor cleanup efforts, failure of the PRF Canyon Crane, increased characterization efforts for safeguards termination issues, impacts from a contamination event resulting from a false criticality alarm during preventive maintenance activities, cleanup of a contamination event in 234-5Z, room 264, delays in electrical isolations in PRF, and greater than anticipated efforts to prepare the PRF canyon for demolition. This is partially offset by completion of E4 characterization and scope avoidance of room characterization is also offsetting some of the unfavorable variance.

CTD Cost Variance (-\$30.1M/-3.3%)

The Cost Variance is within reporting thresholds.

Variance at Completion (-\$56.0M/-5.7%)

The Variance at Completion 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 recognized 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. The variance at completion is reflective of PFP's current projected date to reach slab on grade no later than September 30, 2017.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
Spending Forecast	110.7	106.3	4.4
Incremental Scope Pending Change Management	0	0	0
RL-0011 - Total	110.7	106.3	4.4

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

FY2016 expected funding for PBS RL-0011 remained steady at \$110.7 million. The Fiscal Year Spend Forecast (FYSF) for August decreased slightly from \$106.7 million to \$106.3 million.

Critical Path Schedule

The PFP Critical Schedule Path is a resource driven float path, in which the critical path starts with the removal of 26 inch process vacuum lines and various process equipment removals in the Duct level of 234-5Z. Once this is complete, 234-5Z no longer requires Vital Safety Systems and much of the Cold & Dark isolations begin. Once complete, 234-5Z is ready for demolition. Demolition of 234-5Z will occur in the following sequence: 234-5ZA, Frontside, A-Labs, Backside Rooms/PPSL, RMA Process Lines, RMC Process Lines, and the RADTU & Basement areas. Once the 234-5Z and 291-Z facilities have been demolished, the Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities* will have been met.

Baseline Change Requests

BCR-011C-16-010R0, *Revision to Calendars for FY2017 and FY2018 - PFP CAP 1*
 BCR-011C-16-011R0, *Revision to Calendars for FY2017 and FY2018 - PFP CAP 2*
 BCR-011C-16-012R0, *PRF Glovebox Removal Change in Approach (CAP 2) MR Draw*
 BCR-PRC-16-048R0, *Revision to Calendars for FY2017 and FY2018 – Operations*
 BCRA-PRC-016-049R0, *HPIC Updates August 2016*

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. DOE 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 subsequent approved BCRs define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is a two year look ahead of commitments and Tri-Party Agreement enforceable milestones.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PFP Facility Transition and Selection Disposition Activities	09/30/17		6/22/17	During the month of August the PFP project gained four calendar days to the forecast completion date of the TPA Milestone for the PFP Project to reach Slab on Grade. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, efficiencies will continue to be evaluated and implemented to recover schedule delays.

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 TRU materials outbound/inbound between the Hanford site and Permafix Northwest (PFNW) locations. RL is the authorized shipper and acts as signatory on the shipping papers, and ensures DOE Manual 460.2-1 is complied with. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) level VI vehicle inspections and verifies that the government drivers meet the applicable Department of Transportation (DOT) Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or Transportation Safety Document (TSD) requirements.	Ongoing
J.12/C.2.3.6	PBS-13, Transuranic Waste Certification	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.

Section B

Spent Nuclear Fuel Stabilization and Disposition (RL-0012)



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation
(KBO&PR)

M. A. Wright
Vice President for
Project Technical
Services

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

- The 100K Operations group continued maintaining facilities in a safe and compliant condition, supporting continued debris dose mapping and relocation activities in 105KW Basin and performance of several monthly and quarterly routines during the period. In addition, support was provided to Sludge Removal Project (SRP) work by supporting Annex/ In-Basin equipment installation and facility modifications.
- RL and CHPRC personnel have agreed to draft Performance Measures (PMs) for FY2017 and these PMs have been sent to Department of Energy (DOE) HQ for concurrence. CHPRC is awaiting final verbiage, valuation, and approval from RL.
- Completed PM-12-9-16: Complete Engineered Container Retrieval and Transfer System (ECRTS) Cold Commissioning Testing at MASF.
- Final internal reviews of the 105K West Basin Document Safety Analysis (DSA) and Technical Safety Requirement (TSR) are in progress with submittal to RL for approval expected next month. The DSA/TSR must be submitted, approved and implemented prior to K Basin Preoperational Acceptance Testing (KPAT) activities that transfer 105KW Basin water out into the 105KW Basin Annex.
- Work continues on structural, thermal, gas generation, containment, and criticality evaluations consistent with the RL approved criteria document for the One-Time Request for Shipment (OTRS). The tie down chapter has been completed and is in internal review. The draft thermal analysis report was received from Pacific Northwest National Laboratory (PNNL) on August 19, 2016; internal review was completed and PNNL is resolving comments. PNNL's review of the structural analysis found no issues; therefore, no additional analysis is necessary. The development of the OTRS is on schedule to support readiness activities.
- The design effort to retrieve and containerize the sludge pile discovered during debris mapping continues. Concepts were identified, a specific option for the retrieval equipment was chosen, and the methodology for placing the sludge into an engineered container has been defined. The "dustpan" tool, which will be used to collect the material in the sludge pile in KW Basin, was delivered to the 105KWest Basin and is undergoing examination by Operations personnel.
- CHPRC submitted the FY2017 PMB Update to RL. This deliverable includes a revised estimate-to-complete for currently authorized work scope and a Rough Order of Magnitude (ROM) estimate for proposed scope which is not currently authorized. Following review by RL, CHPRC will incorporate comments and submit the final deliverable in mid-September.

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Dart Injuries	0	0	N/A
Recordable Injuries	0	2	N/A
First Aids	1	15	<ul style="list-style-type: none"> 8/15/16 - While packing contents of desk to move, employee bent and twisted causing a back spasm. Body part affected: Low back (24092)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0012 Accomplishments

KW Basin Sludge Retrieval Capital Assesst Project

- ECRTS Process Equipment Procurement:
 - o Procurement Set #2: General Service (GS) Retrieval and Transfer System Components: Task 5/6 - The Flocculant Addition Skid Spools were receipt inspected and delivered to MASF. Task #8- The final data package for the modified Pig Staging Racks was approved and hardware was delivered to MASF. Task #14 – Replacement hoses H-301, H-302 and H-100 were received and delivered to MASF. Task #15 – HiLine received, inspected, labeled and delivered replacement spare hoses (H-204, H-214, H-217, H-417, and H-419) to Acquisition Verification Services (AVS).
 - o Procurement Set #7: 105KW Annex, Stack Monitoring System –Fabrication and electrical continuity testing of the stack-sampling panel and associated components was completed. CEES completed installation of the stack sampling cabinet ventilation fan and conducted an informal factory acceptance test of the entire system.
 - o Procurement Set #8: Sludge Transport and Storage Container (STSC) Vessels – CHPRC directed ABW to perform free iron testing on STSC 410-413. Following CHPRC approval of the ABW procedure for testing and removing any identified free iron deposits (in accordance with ASTM A380 and ASTM A967); ABW completed the first set of tests. STSC 410-413 were subjected to several cycles of cleaning & retesting but these vessels still do not meet the acceptance criteria imposed by CHPRC. ABW and CHPRC personnel have collaborated on more aggressive cleaning processes and anticipate achieving the acceptance criteria of zero visual rust as defined in ASTM A380. Once the vessels are verified to be acceptable, the vessels will be repackaged and delivered to Richland, WA. STSC 404-409 were shipped from HiLine to ABW in August for free iron testing/cleaning. STSC 402-403 are going to be tested/cleaned/retested at the HiLine fabrication shop in Richland.
 - o Procurement Set #9: SS STSC Assemblies (Instrumentation & Appurtenances) – Sludge Transport Cask drain port tools were delivered to MASF. HiLine is proceeding with fabrication of Sludge Transport Cask, Emergency Vent Tools. HiLine personnel have placed their STSC Instrumentation & Appurtenances contract scope on hold pending disposition of the Non-Compliance Requests (NCR) identified in Procurement Set #8 and further direction by CHPRC.

- The interim disposition to clean and retest the two STSCs has been specified and will be completed by HiLine personnel in their shop.
- o Procurement Set #11: Inert Gas and Auxiliary Ventilation System: Task #6 – Receipt inspection of hose H-659 was completed by AVS and the hose was shipped to MASF. Task #7 – CEES successfully completed testing of the 2” expansion joint assemblies.
 - o Procurement Set #14: SS Control Panels: Task #11 - HiLine completed fabrication, assembly, and testing of Condensate Level Junction Box ECRT-JB-502 and shipped it to AVS. Task #12 – CHPRC provided a Notice to Proceed for procurement and testing of four hoist chain stop block assemblies.
 - MPAT Execution:
 - o Completed PM-12-9-16: Complete ECRTS Cold Commissioning Testing at MASF.
 - o The MASF Testing Team continued post-test instrument calibrations, preps for equipment disassembly/removal, preparation of the MPAT Test Report, and retest/closeout of Testing Deficiency Reports (TDRs).
 - o As of August 25, 149 of 160 TDRs are closed. The remaining 11 are fully dispositioned.

PTS Accomplishments

- KW Annex Construction:
 - o Completed ground connections to building system from new N2 concrete pad.
 - o Removed spool pieces from the instrument air system for shop installation of ECRTS tested instrumentation.
 - o Completed demobilization of Stack sampling test area.
 - o Completed 28-day break for the P-10 and Nitrogen ramp – results were above required design strength.
 - o Completed rebar scan for the installation of the Sand Filter Shielding Assembly.
 - o Completed painting on the sand filter shielding.
 - o Completed preparation of truck scale pit to support installation of ECRTS process equipment.
 - o Sand Filter Shielding Box and baseplate were delivered to site.
 - o Performed off site grout mock up for the sand filter shielding installation.
 - o Received proposal for evaluation, Request for Proposal/Scope of Work (RFP/SOW) for the contract to fabricate the radiological instrument stands and nitrogen awning.
- In Basin Modifications Construction:
 - o Completed grouting the remaining transfer bay spill berms and completed cleanup of work area.
 - o Completed MASF mockup and training for underwater hose connects.
 - o Conducted Construction Completion Documentation (CCD) walk down for NE Corner and Transfer Bay grout.
 - o Received proposal for evaluation, RFP/SOW for the contract to fabricate the booster pump spreader bar.
- T Plant Modifications for Sludge Storage Project:
 - o Installed levelling frame in Cell 14R and pulled the data cable into Cell 14R, in support of the Leak Detection System electrical installation.
 - o Performed glove bag work in the Piping Gallery, removing potential asbestos-containing gaskets and valves from piping, in support of the Leak Detection System electrical installation.
 - o Removed the helium system manifolds in 214T and the tunnel. Also removed the helium system electrical components. Both activities are in support of the installation of the new Nitrogen Purge System.
 - o Installed anchors and performed rebar scanning in the Operations Gallery.

MAJOR ISSUES

Construction Issue:

The T-Plant Crane “jog-switch,” which provides the interface control to the remote operated impact wrench, was found to be inoperable at the end of July and has caused a slip to the Leveling Frame installation for both 14R and the start of 8R of approximately three weeks.

Corrective Action:

Complete trouble shooting and repair crane “jog-switch”. In parallel, construction has initiated discussion with the General Contractor to determine if it is feasible to deploy construction craft to other project work for a period of at least 2-3 weeks (i.e., while crane is being repaired).

Status:

Construction and operations developed schedule impact mitigation plans for 8R leveling frame and leak detection installation. The State required stack inspection during the week of September 19-22 will limit the mitigation effort. Inspection support is mandatory and as a result limited project work will be accomplished during this time period in both the canyon and tunnel.

Construction Issue:

The T-Plant Design Authority (DA) has reservations regarding the control of the Nitrogen System flow and potential damage to the system manometers. Therefore, the DA is requiring replacement of the existing ball valve with a needle valve, which will require a retest of the system and a revised Facility Management Plan (FMP) is forthcoming to reflect this design change. In addition, an update to the construction specification is required to clarify system requirements (e.g., clarify commercial grade dedication requirements for Hilti Kwik Bolts, various labeling clarifications, requirement for stress-corrosion testing, commercial grade dedication clarification for B-Line Tubing Clamps, etc.). As a result, the Project anticipates a 6-8 week delay in safety significant material delivery for Nitrogen System components.

Corrective Action:

- 1) Order the “needle valve” to support system retest and target Nitrogen System retest date.
- 2) Engineering will define “needle valve” pedigree requirements. Once determination is made, the Project will expedite procurement.
- 3) Engineering will respond to General Contractor’s commercial grade dedication questions so other Safety Significant (SS) materials can be ordered.
- 4) Establish with Operations, Engineering and the General Contractor the path forward timetable and how best to limit project cost impacts due to schedule delays and resource constraints through both the system installation and acceptance testing.

Status:

- 1) “General Service” “needle valve” has been ordered to support Nitrogen System retest. Retest is scheduled for September 19, at MASF.
- 2) Engineering determination of the “needle valve” pedigree is still in progress (as of September 12).
- 3) Updated Construction Specification with commercial grade dedication and other miscellaneous requirements issued to the General Contractor on September 8. Construction management will work with contractor to expedite delivery where possible.
- 4) Once the related Nitrogen System technical concerns are resolved with engineering and, the remaining Nitrogen System long lead procurement schedule is understood, then construction will implement a path forward schedule that is supported by Engineering and Operations.

Issue:

Based upon iron contamination discoveries in STSC 402 & STSC 403, ABW was instructed to conduct free iron testing of STSC 410-413. The results of that initial test indicated that all four vessels had some level of iron contamination requiring cleaning to meet the contract acceptance criteria.

Corrective Action:

ABW Technologies, Inc. and CHPRC Technical Staff have developed procedures to aggressively remove iron contamination from STSCs and validate cleanliness via free iron testing of all twelve STSCs fabricated in FY2016 (first production run).

Status:

- o STSC 410-413 are being tested, cleaned and retested, as appropriate in Arlington, WA (ABW Fab Shop). As of 9/13, STSC 410 & STSC 412 have been declared acceptable and will be shipped to the Hanford Site 9/15.
- o STSC 404-409 will all be shipped back to Arlington, WA for testing, cleaning, and retesting, as appropriate.
- o STSC 402-403 remain at HiLine (with instrumentation/appurtenances installed) and will be tested/cleaned by HiLine personnel due to the difficulty/expense of returning these vessels to Arlington, WA.
- o CHPRC & ABW Technologies, Inc. personnel continue to investigate and seek to eliminate the source of iron contamination.

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																								
Explanation of major changes to the project monthly stoplight chart:																								
No major changes to the monthly stoplight chart in the month of August .																								
Realized Risks (Risks that are currently impacting project cost/schedule)																								
STP-123-B: Design Maturity - ECRTS Annex/In-Basin Equip.	Finalization of design media for the ECRTS equipment installation will result in changes to both cost and schedule. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$912K, 64 days	●	↑	Risk Event: The project realized additional cost and schedule impacts in August as a result of the construction review of DCN 391, which indicated the Nitrogen and P10 bottles require weather enclosure for bottle storage (DCN-445). Other DCNs identified in the engineering action list are being developed including but not limited to: Prepare Signage Schedule (DCN-209); Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (DCN-068), Radcon related missing design-Add P-10 Gas Lines to Annex (DCN-391), Shield Cave Mounting (DCN-422), and Changes to I&C Drawing Updates (DCN-405). The project continues to evaluate the DCNs and the impacts to the project. A BCR requesting management reserve for in-scope unplanned work is projected prior to the end of FY2016. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <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>Provide weather protection for Annex Nitrogen Bottle station (DCN-445)</td> <td>06/16/16</td> <td>09/06/16</td> <td>85</td> </tr> <tr> <td>Add Hose & Valve installation at transfer box air system (Mitigation of long lead item impact by awarding procurement released to FFP under Release #2) (DCN-410)</td> <td>12/16/15</td> <td>09/08/16</td> <td>75</td> </tr> <tr> <td>Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (068)</td> <td>12/16/12</td> <td>9/29/16</td> <td>80</td> </tr> <tr> <td>I&C Drawing Updates (DCN - 405)</td> <td>2/8/16</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> Recovery Action Assessment: DCNs are identified and reviewed at the weekly engineering meeting to define a path forward for the pending changes. The majority of the DCNs identified to-date are expected to be cleared by September month end. Delays to DCN completion are due to the lack of scope definition for the initial recovery action and priorities and commitments Engineering and other support resources. During the weekly engineering meetings, the project identifies and reviews DCNs and define a path forward for the pending changes. A Title III Engineering manager has been hired to coordinate the design changes with the construction group. The risk will continue to be monitored by the project. No additional mitigation actions have been identified at this time.	Risk recovery action(s)	Risk Date	FC Date	%	Provide weather protection for Annex Nitrogen Bottle station (DCN-445)	06/16/16	09/06/16	85	Add Hose & Valve installation at transfer box air system (Mitigation of long lead item impact by awarding procurement released to FFP under Release #2) (DCN-410)	12/16/15	09/08/16	75	Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (068)	12/16/12	9/29/16	80	I&C Drawing Updates (DCN - 405)	2/8/16	Complete	100
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																				
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RL-0012/WBS-012																								
<p>STP-072: Delayed STSC/ECRTS Procurement & Delivery</p>	<p>Material delivery and fabrication issues at ECRTS vendor facilities delay the delivery of the components to the Sludge Treatment Plant (STP) resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$3,000K 120 days</p>	●	↑	<p>Risk Event: This risk has been realized. STSC 402 through 405 were shipped to HiLine for the addition of appurtenances to the vessels. While at HiLine, a level instrument test was run that involved filling the STSC with water. After emptying the vessel, areas of rust were discovered. Free Iron testing of vessels 410-413 revealed additional iron contamination of those vessels. As a result, additional testing is required to quantify this nonconforming condition.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>CHPRC Engineering to evaluate the use of alternative/stronger chemical agents.</td> <td>07/22/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Contract with National Association of Corrosion Engineers (NACE), as a corrosion expert for technical support</td> <td>07/22/16</td> <td>9/15/16</td> <td>80</td> </tr> <tr> <td>CHPRC Engineering support ABW to develop a procedure for free iron testing and cleaning of vessels 410-413 including a combination of mechanical cleaning and nitric acid passivation</td> <td>07/22/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Re-plan Field Execution Schedule (FES) activities to include a process of cleaning and delivery.</td> <td>07/22/16</td> <td>09/30/16</td> <td>80</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Evaluation of an alternate chemical agent is required to meet milestone. Processes established August 29, 2016. Contracting with NACE Certified SME to provide technical support in establishing acceptance criteria and monitoring progress to achieve receipt acceptance criteria. Testing has demonstrated that the use of Nitric Acid and pickling jell does appear to provided improved results leading to iron free vessels.</p>	Risk recovery action(s)	Risk Date	FC Date	%	CHPRC Engineering to evaluate the use of alternative/stronger chemical agents.	07/22/16	Complete	100	Contract with National Association of Corrosion Engineers (NACE), as a corrosion expert for technical support	07/22/16	9/15/16	80	CHPRC Engineering support ABW to develop a procedure for free iron testing and cleaning of vessels 410-413 including a combination of mechanical cleaning and nitric acid passivation	07/22/16	Complete	100	Re-plan Field Execution Schedule (FES) activities to include a process of cleaning and delivery.	07/22/16	09/30/16	80
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<p>STP-111-B: Contractor/ Subcontractor Performance - ECRTS Annex/In-Basin Equip. Installation</p>	<p>The General Conditions Contractor and their supporting subcontractors have historically performed poorly and will be challenged on this project by compliance with project and contract flow down requirements (e.g., quality, nuclear standards, site safety requirements, subcontract management to ensure contract requirements are met, NRTL compliance, suspect counterfeit, Buy-American contract clause, Project Controls requirements, development of Construction Acceptance Testing [CAT], timely processing of submittals compliance with all the subcontract flow down requirements) as well as deployment and maintenance of key staff that are essential to safe, cost effective and on-time project delivery.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Very Likely (> 90%)</p> <p>Worst Case Impacts: \$792K, 96 days</p>	●	↔	<p>Risk Event: The project continues to experience contractor delay due to inadequate general conditions staffing. Bi-weekly notes regarding these issues are being sent to the contractor via CHPRC Contracts Department. Finding a backup for the contractor's high risk Field Work Supervisor (single point failure) continues to be an issue. The issues in August have been associated with late or missing Project Controls required data. Change orders have been caught up historically and they have hired additional GC staff to continue to maintain the pace required for proposals. The contractor found a qualified FWS backup by utilizing a contract to another high-risk BOA contractor for the resource. Additionally issues regarding safety pre-start paperwork has been found to have missing signatures and incorrect information, causing delays in field activities. Material procurements are also starting to affect field execution; specifically, the wrong aggregate was ordered, causing a three-day delay in the mock up for the grouting of the sand filter shielding. In addition, electrical work progress has been limited due to various procurements (i.e. anchor bolts and unistrut).</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Contractor delays due to inadequate staffing/mobilization. Will work with contractor to stabilize work resource planning.</td> <td>5/17/16</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p>Recovery Action Assessment: This is a reoccurring risk relating to the performance of the General Contractor and their supporting subcontractors. The CHPRC project team continues to work with their subcontractors to ensure the contractors are thoroughly aware of their project responsibilities and have the opportunity to complete their project scope successfully. Mitigation actions are in place that are expected to reduce the probability of the risk occurrence and reduce the potential cost and schedule impact, and the risk will continue to be monitored. No additional mitigation actions have been identified at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Contractor delays due to inadequate staffing/mobilization. Will work with contractor to stabilize work resource planning.	5/17/16	Ongoing	NA												
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0012/WBS-012																
<p>STP-144: Baseline strategy agreed to by RL and CHPRC on Transportation Safety documentation requirements for moving STSCs from the 105K West Basin to T-Plant storage is changed.</p>	<p>Revision to the Transportation Safety strategy (Site Requirements, Processes and Procedures) regarding shipment of STP STSCs from the 100K area Equip to T-Plant for interim storage could delay RL approval to commence operations. Risk Handling Strategy: Control Probability: Very Likely (>90%) Worst Case Impacts: \$2 million, 256 days</p>	●	↔	<p>Risk Event: This risk has been realized. The new RL Transportation Safety Manager and the CHPRC Transportation Safety Manager have agreed to a Transportation Strategy that utilizes an OTRS.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Prepare and submit BCR for additional work scope</td> <td>7/31/16</td> <td>9/30/16</td> <td>35</td> </tr> </tbody> </table> <p>Recovery Action Assessment: CHPRC has updated the project schedule and completed a cost estimate for this work scope to accommodate the new transportation strategy. A BCR is in development to address the additional scope and will be processed by the end of the fiscal year.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Prepare and submit BCR for additional work scope	7/31/16	9/30/16	35				
Risk recovery action(s)	Risk Date	FC Date	%													
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<p>STP-103-M: MASF Pre-Operational Acceptance Testing (MPAT)</p>	<p>The ECRTS equipment does not operate as expected, requiring increased engineering & MASF Testing Staff Support. This will require design modifications of production hardware and changes to control system software. These modifications will negatively impacts downstream testing, construction, readiness and ECRTS Operations. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$500K, 60 days</p>	●	↑	<p>Risk Event: This risk has been realized. During the month of May, the second Transfer System Instrument Spool failed.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure 4 Operationally sound Transfer System Instrument Loops after corrective actions are fully implemented.</td> <td>5/31/16</td> <td>8/31/16</td> <td>50</td> </tr> <tr> <td>Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.</td> <td>5/31/16</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Recovery Action Assessment: While there were 160 TDRs, many associated with equipment operating anomalies and a number of design changes to existing configuration, the technical staff was successful in addressing the balance of the challenges without impacting MPAT test duration or cost. All TDR's are now closed with the retests steps of five TDR's deferred to KPAT. The recovery action was added to pursue instrument failure analysis, track corrective action implementation, and obtain replacement instrument spool assemblies and spares. As a result, the risk strategy has been changed to control.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Procure 4 Operationally sound Transfer System Instrument Loops after corrective actions are fully implemented.	5/31/16	8/31/16	50	Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.	5/31/16	Complete	100
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Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																
No critical risks identified in the month of August.																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
FY2017 Risk Triggers (Risk could be realized in FY2017)																

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																					
		Month	Trend																						
RL-0012/WBS-012																									
STP-103: K Basin Pre-Operational Acceptance Testing (KPAT) & ECRTS Startup	<p>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 as a result of construction testing and/or Lines of Inquiry for Readiness Review resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$4.5 million, 90 days</p>	●	↔	<p>Risk Trigger: 1) The ECRTS equipment does not operate as expected. 2) Unexpected attrition of critical testing personnel.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct Full-scale testing of production hardware at MASF prior to installation at K-Basin to avoid costly replacement of malfunctioning equipment during Hot Startup.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop and refine procedures based upon feedback from testing and operations personnel.</td> <td>3/15/17</td> <td>25</td> </tr> <tr> <td>Any Technical Challenges identified at MASF will be evaluated and corrective actions established to resolve prior to completion of cold commissioning.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.</td> <td>3/15/17</td> <td>10</td> </tr> <tr> <td>Utilize 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> <p>Mitigation Assessment: Forecasted mitigation dates are consistent with overall STP critical path schedule.</p>	Mitigation action(s)	FC Date	%	Conduct Full-scale testing of production hardware at MASF prior to installation at K-Basin to avoid costly replacement of malfunctioning equipment during Hot Startup.	Complete	100	Develop and refine procedures based upon feedback from testing and operations personnel.	3/15/17	25	Any Technical Challenges identified at MASF will be evaluated and corrective actions established to resolve prior to completion of cold commissioning.	Complete	100	Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.	3/15/17	10	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
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Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.	3/15/17	10																							
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																							
FY2018 Risk Triggers (Risk could be realized in FY2018)																									
STP-018-O: STP Operational Upset or Spill - During 1st STSC	<p>An operational upset or spill results in a work shutdown at K Basins, resulting in schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$1.3 million, 96 days</p>	●	↔	<p>Risk Trigger: 1) An operational upset or spill results in work shutdown at K Basin. This risk will commence in FY2018 and continue throughout project lifecycle until sludge is removed from 105KW Basin.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.</td> <td>10/11/17</td> <td>0</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>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of August. Forecasted mitigation dates are consistent with overall STP critical path schedule. Training and procedure development will continue into FY2018. It will complete prior to completion of management self-assessment affidavits in December 2017.</p>	Mitigation action(s)	FC Date	%	Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	10/11/17	0	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.	Ongoing	N/A												
Mitigation action(s)	FC Date	%																							
Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	10/11/17	0																							
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.	Ongoing	N/A																							
STP-073-C: Processing Efficiency - Retrieval & Shipping, During 1st STSC	<p>The realized processing efficiency associated with sludge retrieval and shipping operations does not match baseline plan.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$0K, 8 days</p>	●	↔	<p>Risk Trigger: 1) 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 changes in the month of August. Operations personnel were given training on the process system equipment and will continue to participate in training activities through production system installation at 100K. No foreseeable impacts in the near future and no alternative course of actions 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)																									
<p>CHPRC proposed five risks that are outside of CHPRC's ability to manage and, as such, should be re-assigned to RL (STP-011D, STP-018, STP-073, STP-073-A, and STP-073-B). The proposal was not accepted by RL, stating, "...the opportunities and threats appear to be under the control of CHPRC to manage." CHPRC plans to submit letter CHPRC-1602146 R1 on August 30, 2016, in response to RL's rejection letter.</p>																									

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	7.2	6.0	5.5	(1.2)	-16.3%	0.5	7.9%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$1.2M/-16.3%)

BCWS is being recognized for material procurement for STSC vessels 13-24, which was completed ahead of schedule. The BCWS is just now catching up to the BCWP. In addition, the relidding workscope completed five months ahead of schedule. The last of the performance was claimed during the period, which was minimal as the BCWS comes into the current month window. In addition, performance was over stated in the prior month for Procurement Set 9 - the negative schedule variance this month is a partial correction of this error. Another contributor to the schedule variance was implementation of the alternate contracting strategy to start contractor on-site training, in-basin work package preparation, pre-mobilization, ingress / egress and installation of HIHTL shielding dog house work ahead of plan due to slip in receipt of In-Basin Equipment for installation. The contractor training at MASF and review of redline drawings following cold commissioning (a risk activity) is behind schedule due to late receipt of In-Basin Equipment for installation. Training at MASF is scheduled to start the beginning of August versus July as planned, but is still anticipated to complete on schedule in mid-August.

CM Cost Performance (+\$0.5M/+7.9%)

Efficiencies have been achieved by centralizing Program Management responsibilities, which has resulted in a reduced staff level. The level of Title III support required has been less than planned, in the Annex & In-Basin facilities, due to a one month delay in the receipt of equipment and lower than anticipated requirements for design changes (to date). The project is performing the work with reduced staff. In addition, a portion of the cost variance is positive, which is due to the BCWP correction on Procurement Set 9 discussed in schedule performance. The STP Cold Commissioning (MASF Testing) is showing an overrun, as staff finalizes the MASF Pre-Operational Acceptance Testing (MPAT) test report and transitions to the equipment removal and transfer work scope. Overall, the project is reflecting a positive cost variance.

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)	Variance at Completion (VAC)
Total	613.9	614.6	589.9	0.8	0.1%	24.7	4.0%	738.8	712.1	26.6

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$0.8M/+0.1%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$24.7M/+4.0%)

The variance is within reporting thresholds.

Variance at Completion (+\$26.6M/+3.6%)

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	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Expense - Spending Forecast	53.0	41.4	11.6
Incremental Scope Pending Change Management	0.0	0.0	(0.0)
Expense - Subtotal	53.0	41.4	11.6
Line Item	68.1	32.2	35.8
Incremental Scope Pending Change Management	0.0	0.0	(0.0)
LI -Subtotal	68.1	32.2	35.8
RL-0012 – Total	121.1	73.6	47.4

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

FY2016 projected funding for PBS RL-0012 is \$121.1 million. The Line Item funding for the STP Capital Asset Project (CAP) has been assigned for FY2016 and FY2017 work scope, thus causing a positive variance in FY2016.

Critical Path Schedule

The critical path flows through disassembly, cleaning, & inspection of the ECRTS production hardware test loop at MASF, transporting that hardware to the 105KW Basin/Annex Facility, installation of process equipment in the 105K West Basin/Annex, KPAT of the process equipment, readiness activities, and finally, containerized sludge retrieval operations. Retrieval operations include the filling of STSCs with sludge and transferring them to T Plant, completing Tri-Party Agreement milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin* is outside contract period in FY2019.

Baseline Change Requests

BCR-012C-16-028R0, *Revision to Calendars for FY2017 and FY2018 - STP CAP*

BCR-012-16-029R0, *Definitization of CO #301 100-KW Sand Filter Media Remediation*

BCR-012-16-030R0, *Definitization of CO 300 - 100KW Garnet Filter Remediation*

BCR-PRC-16-050R0, *Undistributed Budget Adjustments August 2016*

BCRA-PRC-16-049R0, *HPIC Updates August 2016*

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. DOE 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 subsequent approved 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		8/26/2018	The forecast date includes schedule margin from the project's risk analysis. Project schedule margin is 104 days. This is an improvement from 83 days in July. The forecast schedule was revised, based on knowledge learned from MPAT testing and the revised start of KPAT testing.
M-016-177	Complete installation of sludge transfer equipment in K West Reactor facilities	9/30/2017		6/01/2017	The forecast date does not include schedule margin.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

Section C

Solid Waste Stabilization and Disposition (RL-0013)



C. J. Simiele
Vice President for
Waste and Fuels
Management Project
(W&FMP)

M. A. Wright
Vice President for
Project Technical
Services

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

W&FMP maintained facilities in a safe and compliant condition. More than two million hours have been completed without a DART/Lost work time. Overall, the project is delivering planned efficiencies, but continues to be impacted by emerging work and realized risks. This month W&FMP completed final installation of the new HEPA filters in support of ventilation modifications of the WESF. Core drilling began to stabilize legacy contamination in WESF hot cells. The Permit Modification Decision is completed for WESF Closure Plan. The Award Recommendation Report was approved for Capsule Extended Storage Project. The repair of the roof was completed at Central Waste Complex (CWC).

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
16-EMS-WFMP-OB1-T1	Improve container labeling.	Reconcile data between SWITS and the Operating Record for 750 containers at CWC, and update container labeling for those containers (if needed).	9/30/16	100%
16-EMS-WFMP-OB1-T2	Improve consistency in RCRA inspections between WFM facilities.	Establish consistent format, language, approvals, and corrective action tracking standards for WFM RCRA inspections.	9/30/16	100%
16-EMS-WFMP-OB1-T3	Improve consistency in recordkeeping for RCRA inspections at CWC.	Evaluate and issue procedure for an automated RCRA Checklist and inspection system for CWC.	9/30/16	85%

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	2	16*	<ul style="list-style-type: none"> • 8/3/2016 - Employee tripped causing pain to left knee. Employee returned to work with a restriction, but is still able to perform duties. (24080) • 8/23/2016 - Employee missed the last step on stairs and fell forward hitting the cement with hand/knee causing soreness to left knee and the skinned area was bleeding. Employee returned to work with a restriction to keep open wound covered and protected until healed. (24098) <p>*1 First Aid case, PTS in support of RL-0013.</p>
Near Misses	0	1	N/A

KEY ACCOMPLISHMENTS

13.01 Project Management

- o Responses to Ecology's comments of the M-091 Project Management plan have been drafted. (Tri-Party Agreement Milestone M-091-03).

13.02 Capsule Storage & Disposition

- o Surveillances/ Preventive Maintenance:
 - 26 Preventive Maintenance work packages.

a. Capsule Extended Storage Project:

- o Performed/Completed:
 - The Source Selection Official approved the Award Recommendation Report.

b. WESF Stabilization and Ventilation Project (W-130):

- o Performed/Completed:
 - Installation of the HEPA in K3N Vent skid.
 - Backfill, compaction, and bollard installation of condensate/vent line trench.

13.03 Canister Storage Building (CSB)

- o Performed/Completed:
 - Repair to the Interim Storage Container (ISC) Concrete Storage Pad.
 - Initiated removal of metal waste from CSB Laydown Yard.
- o Surveillances/ Preventive Maintenances:
 - 18 Preventive Maintenance packages.

13.06 TRU Repackaging

- o TRUM waste completed and returned fiscal year to date – 429 m3.
- o Shipments:
 - Three large waste boxes from CWC to Permafix Northwest (PFNW) in three shipments.

- o Shipments Received:
 - Nine waste boxes from PFNW to CWC in two shipments.

13.07 WRAP

- o Performed/Completed:
 - Repairs to pneumatic positioner relay.
 - Repairs to close fire system restrictions 16-087 and 16-121.
- o Surveillances/ Preventive Maintenances:
 - 120 Surveillances.
 - 14 Preventive Maintenance packages.
- o Shipments Received:
 - Ten drums and two waste boxes from PFP and WCH to WRAP in six shipments.

13.08 T Plant

- o Performed/Completed:
 - Removal of cover blocks for cell 14R.
 - Installation of level platform in cell 14R.
- o Surveillances/ Preventive Maintenances:
 - 438 Surveillances.
 - 29 Preventive Maintenance packages.

13.09 CWC and Low Level Burial Grounds (LLBG)

- o Performed/Completed:
 - Repair of Mixed Waste Trench 34 primary sump pump.
 - Roof repairs at 2402-WB.
- o Surveillances/ Preventive Maintenances:
 - 25 Preventive Maintenance packages.
 - 290 Surveillances.
- o Shipments:
 - Twenty nine drums and 11 waste boxes from PFP to CWC in five shipments.

13.12 Integrated Disposal Facility

- o Completed monthly inspections.

13.14 Solid Waste Base Operations

- o Environmental Enhancement:
 - Automated Resource Conservation and Recovery Act of 1976 (RCRA) Inspection sheets
- CWC:
 - Continued Integrated Document Management System (IDMS) interface with Tablets and software.
 - Continued development of MSA drop zone in IDMS.

13.16 Off Site Spent Nuclear Fuel Disposition

- o Maintained coordination for offsite Spent Nuclear Fuel Disposition.

13.21 Mixed Waste Disposal Trenches (MWT)

- o Surveillances/ Preventive Maintenances:
 - 147 Surveillances.

PTS Accomplishments

- **WESF W-130 Stabilization:**
 - o Damaged fans repaired and installed on K3N exhaust skid.
 - o Commenced core drilling on K3 filter pit (two cores completed).
 - o Commenced backfilling and removal of shoring around K3N exhaust skid
 - o Commenced grout pour at the K3 filter pit-approximately 35 percent complete.
 - o Completed K3N outage Construction Completion Documents (CCD)-Operations currently performing Operational Acceptance Test (OAT).

- o Completed installation of Containment Tent for Filter Pit Core Drilling.
- o Vent and condensate lines insulated, trench filled with CDF and site is stabilized and ECO blocks in place at North end of skid.
- o Commenced insulation of above grade condensate line.
- o Core drilled in truck port for additional AC units.
- o Continued with Electrical Isolation work in Service Gallery.
- o Ventilation ATP 100 percent complete.
- o Mechanical Isolations 53 percent complete.
- o Electrical Isolations 54 percent complete.
- o Core drill activities, mobilized into canyon to start early core drilling activities
- **ERDF Transfer Line:**
 - o Project closeout completed.
- **Trench 94:**
 - o Completed repairs to all 10 of the initial Reactor Components Design (RCD) packages (2,883 Spent Fuel).
 - o Commenced repair work on second set of RCD packages identified during Navy inspection.
 - o Reached contract funding ceiling. Contractor demobilized from site. Completed final walk down.
- **CSB Door Repair:**
 - o Proposals received from contractors.
 - o Engineering revision scope and FMP, RFP will be re-issued.
- **CWC Roof Repairs:**
 - o Continued repair of 2403 WB. (95 percent)
 - o Completed repairs at 2403WD. (40 percent)
 - o Mobilized to building 2404-WA.
 - o 11 of 13 roof repairs completed to date.

MAJOR ISSUES

Issue:

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

Corrective Action:

Significant risk remains. TRU Disposition activities would prepare the contents of these containers in a configuration suitable for eventual disposal at the Waste Isolation Pilot Plant (WIPP). This 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 and over packing drums).

Issue:

The CSB FF-01 license contains a maximum stack flow rate of 9,000 Cubic Feet per Minute (CFM), while the monitoring system was verified to be in compliance with regulatory requirements at higher flow rates.

Corrective Action:

RL and Washington State Department of Health (WDOH) were notified of the situation. Options to rectify the situation were evaluated. WDOH prefers an engineering evaluation by PNNL to justify use of flow rates less than 9,000 CFM, which the facility has predominately maintained since start up. This will also provide defensibility for past emission data. Engineering provided information to PNNL to support this evaluation. Following successful completion of the engineering evaluation, CHPRC/RL will submit a Notice of Construction (NOC) revision to modify the license to reflect the wider range of stack flow rates.

Status:

RL provided direction to proceed with the PNNL statistical analysis of the CSB stack flow data as well as data from other similar stacks. A contract was awarded to PNNL on July 29, 2015. PNNL supplied preliminary information on September 28, 2015, providing a basis for an expanded flow range. A meeting with RL and WDOH was held October 8, 2015, to present this preliminary data. On October 22, 2015, cleared copies were provided to WDOH for review. WDOH provided positive feedback on the PNNL presentation; but wanted one of six original tests to be re-performed at lower flow rates to validate the PNNL statistical analysis, which used test results from similar stacks for comparison. RL contractual approval was provided April 19, 2016, for the planning and conduct of the flow testing desired by WDOH. Field work to collect data was completed on August 15, 2016. A presentation to RL of results and proposed actions to close this issue with WDOH and WDOE is scheduled for September 12, 2016.

Issue:

On May 11, 2016, during the routine sampling of mechanically sealed Multi-Canister Overpack (MCO) H-176, the internal gas pressure was determined to be less than required per Process Standard 331-PS-610. The internal pressure represented a 10-year leak rate in excess of the assumed value utilized in the Canister Storage Building Safety Basis. By procedure the MCO was backfilled with high purity (99.96 percent) Helium. On May 18, 2016, CSB entered into the Potential Inadequacy in the Safety Analysis (PISA) process. On May 26, 2016, an operability evaluation was issued, and the Fuels Facilities (FF) Plant Review Committee (PRC) determined that a positive Unreviewed Safety Question (USQ) exists. Occurrence report EM-RL—CPRC-CSB-2016-0001, *Positive Unreviewed Safety Question Related to MCO H-176 Observed Pressure Decrease* was initiated for:

3B(1) (SC-2) - Determination of a positive USQ that reveals a currently existing inadequacy in the documented safety analysis.

4A(1) (SC-3) - Performance degradation of any Safety Class (SC) or SS Structure, System, or Component (SSC), or any support system that is required for safety operation of the SC or SS SSCs, which prevents satisfactory performance of its design function when it is required to be operable.

Corrective Action:

On May 18, 2016, when the PISA process was initiated, a CSB Timely Order was issued to prevent movement of MCO H-176 from Sample/Weld Pit #7.

On May 26, 2016, the FF PRC implemented compensatory actions for ensuring that MCO H-176 remains pressurized with an effectively pure inert gas to compensate for excessive MCO leakage. It will also avoid conditions (pressure inducing chemical reactions within the MCO) that may challenge the MCO pressure rating. The following actions were directed:

- A. Leave MCO H-176 in its current location (Sample/Weld Pit #7).
- B. Monitor, on a periodicity determined by Engineering, MCO H-176 temperature and pressure as displayed on the MCO shield plug gauges.

- C. As conditions may require, sample and re-fill MCO H-176 to maintain inert gas pressures within the range specified in process standard PS-610.

On June 23, 2016, an Evaluation of Safety of the Situation (ESS) on MCO H-176 was transmitted to RL. It concluded that MCO H-176 in its current condition is safe and that CSB, through implementation of three compensatory measures listed above, is in a safe configuration. CSB revised the initial Timely Order to implement the three compensatory measures until a safety basis change/revision has been approved by RL.

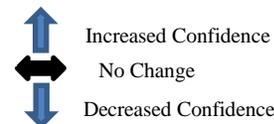
Status:

A report is in process to document normal and expected changes in MCO pressure and temperature, and the limitations on measuring those values. That report will be issued as CHPRC-03056 [at a later date]. Based on the expected conclusions in CHPRC-03056, Fuels Facilities Engineering has issued a summary report (CHPRC-03058) showing that the factors assumed to cause normal and expected changes in MCO pressure do not account for the pressure decreases observed in MCO H-176. It is therefore assumed that the pressure decrease between 2006 and 2016 resulted from a leak rate that exceeds that assumed by the Facility Safety Analysis Report (FSAR). The Cause Analysis associated with the Occurrence Reporting & Processing System (ORPS) report will continue based on this conclusion and is currently on track for closure by the September 29, due date.

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 August.																					
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 SWOC (excluding TRU Retrieval activities) and require 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;"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform daily/weekly waste container surveillances to identify container abnormalities.</td> <td rowspan="4" style="text-align: center;">11/01/11</td> <td style="text-align: center;">On-Going</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;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Overpack degraded waste packages.</td> <td style="text-align: center;">09/30/2016</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Process waste packages at a rate funded by RL.</td> <td style="text-align: center;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table>	Risk recovery action(s)	Risk Date	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	11/01/11	On-Going	N/A	Manage a "watch-list" of waste containers that have shown signs of degradation or are associated with degraded containers.	On-Going	N/A	Overpack degraded waste packages.	09/30/2016	0	Process waste packages at a rate funded by RL.	On-Going	N/A
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Manage a "watch-list" of waste containers that have shown signs of degradation or are associated with degraded containers.		On-Going	N/A																		
Overpack degraded waste packages.		09/30/2016	0																		
Process waste packages at a rate funded by RL.		On-Going	N/A																		
Recovery Action Assessment: Project continued to perform container surveillances in the month of August to identify container and container cover abnormalities. Overpack of 25 drum waste packages is forecasted to complete prior to the end of September. RL has authorized the overpack of an additional 50 drums in FY2016. The project will perform the overpack for Storage box 75DMA16F3, with a subsequent move into 2403WD, once resources become available. The remaining containers will continue to require surveillance and continue enhanced monitoring.																					

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
WSD-W130-17: Changes in the final design are needed after the design is issued	<p>Changes in the final design are needed after the design is issued. Changes are driven by unexpected conditions, additional reviews of the design media, or field conditions. Design changes result in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$550K, 112 days</p>	●	↔	<p>Risk Event: Risk was realized when additional reviews of design media and K3N ventilation skid as-built conditions were analyzed during writing of test and operating procedures. Four separate issues have led to the realization of this risk:</p> <ol style="list-style-type: none"> 1) Changes in fire suppression system design are necessary to allow leak testing of the full system due to limitations in the existing skid design. 2) K3N skid requires modifications to ensure proper operation at WESF. 3) Hot cell penetration sealing requires more work than planned. 4) Communication between hot pipe trench in WESF and B Plant causes grout to flow into B Plant during trench grouting. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Risk recovery action(s)</th> <th style="text-align: center;">Risk Date</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Place localized stiff grout mix in hot pipe trench at interface point to B Plant to block grout from flowing into B Plant during trench grouting.</td> <td style="text-align: center; vertical-align: middle;">02/01/16</td> <td style="text-align: center;">09/17/16</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Prioritize completion of hot cell penetration sealing required for core drilling between hot cell walls first to mitigate schedule impacts</td> <td></td> <td style="text-align: center;">09/10/16</td> <td style="text-align: center;">60</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Work to isolate and seal all penetrations in the service and operations galleries is in progress. Penetrations that run through the hot cell walls and are required to be completed prior to core drilling vertically through hot cell walls have been prioritized to be completed first. A stiff grout mix placement at the interface location between WESF and B Plant in the hot pipe trench has been planned.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Place localized stiff grout mix in hot pipe trench at interface point to B Plant to block grout from flowing into B Plant during trench grouting.	02/01/16	09/17/16	0	Prioritize completion of hot cell penetration sealing required for core drilling between hot cell walls first to mitigate schedule impacts		09/10/16	60
Risk recovery action(s)	Risk Date	FC Date	%													
Place localized stiff grout mix in hot pipe trench at interface point to B Plant to block grout from flowing into B Plant during trench grouting.	02/01/16	09/17/16	0													
Prioritize completion of hot cell penetration sealing required for core drilling between hot cell walls first to mitigate schedule impacts		09/10/16	60													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																
Lifecycle Risk Triggers (Risk could be realized at any point of the project)																

Risk Title	Unmitigated Risk Impacts	Assessment		Comments		
		Month	Trend			
RL-0013/WBS-013						
WSD-019: MLLW & TRU Treatment Impacts	Mixed low-level waste (MLLW) & 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: Very Low (<10%) Worst Case Impacts: \$10 million, 0 day	 	Risk Trigger Metric: Will continue throughout contract (September 30, 2018).			
			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).		On-Going	N/A
			Continue to work with RL to fund the processing of TRU/M waste at PFNW at a rate in which keeps them viable (i.e., keeps the doors open).		On-Going	N/A
			Work with RL and PFNW to increase the quantity of NRC defined special nuclear material (SNM) in PFNW's Mixed Waste Facility (MWF). Their current limit is 200 grams of total Pu. The limit needs to be increased between 400 – 1,000 grams to allow for larger TRU/M waste quantities to be received and processed at their MWF.		On-Going	N/A
Mitigation Assessment: 1) MLLW: Two contracts in place with offsite commercial waste treatment which provides 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 Perma-Fix treatment facility in Tennessee (M&EC). Additional capability will need to be obtained to meet regulatory requirements. TRU/M: Only PFNW is provided with current capability to process TRU/M waste. This is due solely on the practical limitations imposed by the need to ship the TRU/M waste via road-closure; therefore, additional commercial providers cannot be obtained. 2) 10 waste packages are authorized in the 4th quarter of 2016 total ~200m3 which will maintain PFNW's viability through the end of this fiscal year. Additionally, it is anticipated that PFP will be making direct TRU waste shipments to PFNW during facility demolition. These shipments will provide enough waste to PFNW to keep them viable for all of FY2017 and possibly FY2018. 3) RL's action to authorize and or fund this action. If the TRU/M waste generated from the PRF Canyon floor cleanout (J-Pan waste) requires treatment, it would significantly impact the projects ability to have sufficient treatment capability/capability at PFNW for the processing of Legacy TRU/M waste to meet M-091-47C and -47D objectives for FY2017 and FY2018. Current alternative course of action: To minimize potential impacts to PFP, the plan is to send the PRF Canyon Floor waste to CWC for interim storage, and then if required, gradually ship the waste packages to PFNW for processing as license limits permit. However by doing this, RL-0013 will assume the regulatory risk associated with the waste (i.e., more stringent requirements under RCRA at CWC compared to under CERCLA at PFP); additionally, if treatment is required, it will still load up PFNW with respect to their Pu limits for several years which would significantly limit the shipment of other Pu containing waste (i.e., legacy large container TRU/M waste) to PFNW for processing.						
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)						
Lifecycle Risk Triggers (Risk could be realized at any point of the project)						

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0013/WBS-013													
WSD-097: Major Equipment Failure - T-Plant	T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts, and schedule delays. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$2 million, 33 days	●	↔	<p>Risk Trigger Metric: During planned facility operations activities a suspect 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).</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 August. The mitigation strategies have been put in place (i.e., aggressive S&M activities), as a result, the risk strategy is to accept with no further mitigation actions. Work to repair/replace the Crane rail clip is complete. The crane is currently operational. No alternative course of actions 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											
WSD-136:CWC Components Fail	CWC facilities and components may reach their end of life or become obsolete. These items will need to be replaced and/or repaired outside of planned funding profiles, resulting in cost impacts. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$1.5 million, 0 day	●	↔	<p>Risk Trigger Metric: During planned facility operations activities a suspect 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).</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 August. The mitigation strategies have been put in place (i.e., S&M activities), as a result, the risk strategy is to accept with no further mitigation actions. No alternative course of actions 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											
WSD-137: OPP: Planned Efficiencies	Funding profile for the contract period are achieved through efficiencies. Risk Handling Strategy: Exploit Probability: Likely (75% to 90%) Worst Case Impacts: \$32 million, 0 day	●	↔	<p>Risk Trigger: Will continue throughout project lifecycle (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Opportunity action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Plan work activities and procurements to be as efficient as possible with minimal resources.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p>Opportunity Assessment: No changes in the month of August. The project is continuing implementation of planned efficiencies (approximately \$58 million to date), however, due to impacts associated with increased regulatory scrutiny, maintenance lessons learned across CHPRC/ DOE Complex, and heightened compliance postures, forecasts will be updated to reflect a reduced level of efficiencies through the balance of the contract period of performance.</p>	Opportunity action(s)	FC Date	%	Plan work activities and procurements to be as efficient as possible with minimal resources.	On-Going	N/A			
Opportunity action(s)	FC Date	%											
Plan work activities and procurements to be as efficient as possible with minimal resources.	On-Going	N/A											
FY2016 Risk Triggers (Risk could be realized in FY2016)													
WSD-W130-18: Failure of WESF Hot Cell during Grouting	There is a risk that the capacity of the floor or walls of the hot cells cannot sustain the applied loads from grout and fails. In addition, a failure to the cover blocks and or the canyon floor result in cost impacts, and schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$650K, 144 days	●	↔	<p>Risk Trigger Metric: Initiation of hot cell grouting.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.</td> <td>09/30/16</td> <td>0</td> </tr> <tr> <td>Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.</td> <td>09/30/16</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of August. Structural evaluations and calculations have been completed and identified controls necessary during grouting (limit lifts of grout placement to three feet, compare actual grout volume placed to calculate estimated volume). No alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.	09/30/16	0	Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.	09/30/16	0
Mitigation action(s)	FC Date	%											
Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.	09/30/16	0											
Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.	09/30/16	0											
Unassigned Risks (Pending ownership of identified risks/opportunities)													
No unassigned risks identified in the month of August.													

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	8.7	8.9	8.7	0.2	2.2%	0.2	2.1%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+0.2M/+2.2%)

The current month schedule variance is within threshold, however WBS 013.06.01.08 – RH/Large Box Repack shows a positive schedule variance (\$1.1M) due to accelerated shipments for scope planned in FY2017 and WBS 013.02.02.02 – WESF K3 Exhaust Ventilation has a negative schedule variance (\$700K) due to contractor missing ‘T’ fittings during grouting that led to a grout overflow and causing the activity to slip.

CM Cost Performance (+0.2M/+2.1%)

The current month cost variance is within threshold.

Contract-to-Date (CTD)

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	1,078.3	1,078.6	1,011.5	0.3	0.0%	67.1	6.2%	1,342.0	1,285.5	56.5

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+0.3M/+0.0%)

The schedule variance is within threshold.

CTD Cost Performance (+\$67.1M/+6.2%)

The favorable cost variance is due to the continued implementation of planned efficiencies.

Variance at Completion (+\$56.5M/+4.2%)

The Variance at Completion is within threshold.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
Spending Forecast	106.7	99.7	7.0
Incremental Scope Pending Change Management	0.0	0.9	(0.9)
RL-0013 – Total	106.7	100.6	6.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The Fiscal Year Spending Forecast increased and the Incremental Scope Pending Change Management decreased concurrently due to the implementation of BCR-013-16-028R0 Definitization of CO #269 K3 Ventilation and Stabilization (\$3 million). Further positive spend variance is attributed to WBS 013.02.02.02 – WESF K3 Exhaust Ventilation due to contractor slowdown in spending during the grout overflow incident.

Critical Path Schedule

WESF Ventilation & Stabilization Project, W-130, critical path shows a completion of Performance Measure, PM-13-5-16, on October 6, 2016. Project is working a 5 x 10 schedule with Saturday work evaluated weekly against available resource. Core drilling and grouting activities have been prioritized and work evolutions planned to maximize resource efficiency but the delay due to grout overflow has slipped the expected finish of PM-13-5-16 past September 30, 2016.

Baseline Change Requests

BCR-013-16-027R0, *Schedule Health*

BCR-013-16-028R0, *Definitization of CO #269 K3 Ventilation and Stabilization*

BCR-013C-16-029R0, *Convert Project Management Scope for W-135 Planning Packages to Work Packages*

BCR-PRC-16-048R0, *Revision to Calendars for FY2017 and FY2018 – Operations*

BCRA-PRC-16-049R0, *HPIC Updates August 2016*

BCR-PRC-16-050R0, *Undistributed Budget Adjustments August 2016*

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. DOE 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 subsequent 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-091-51	Submit secondary document for new or modified facilities to process all Hanford Site RH TRUM waste.	9/30/16		9/30/16	On Schedule
C-026-07K	Tritium Treatment Technology Developments to Ecology & EPA	3/31/17		3/31/17	On Schedule
M-091-03K	Submit Revision of TRUM Waste and MLLW PMP to Ecology	6/30/17		6/30/17	On Schedule
M-026-01AA	Submit Hanford Land Disposal Restrictions Summary Report	4/30/17		4/30/17	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-11, Plutonium Finishing Plant Closure Project PBS-13, Solid and Liquid Waste Treatment and Disposal	Offsite Transportation of Radioactive Material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford site and 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 TSD requirements.	Ongoing
J.12/C.2.3.6	PBS-13, 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.

Section D

Soil and Groundwater Remediation Project (RL-0030)



K. L. Wiemelt
Vice President and
Project Manager for
Soil and Groundwater
Remediation Project

M. A. Wright
Vice President for
Project Technical
Services

August 2016
CHPRC-2016-08, 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

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. In August, PTS continued to support well realignment activities in the 100-HR-3 and 100-KR-4 Operable Units and hook up of the 200-DV-1 perched water system in addition to completing the tank platform installation at the 200 West P&T. 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)		Nitrate as N (kg)		Tech-99 (pCi)		Uranium (kg)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX P&T	32.6	359.5	6.2	65.2								
HX P&T	29.9	265.5	2.7	24.0								
KR-4 P&T	13.6	145.8	0.1	2.9								
KW P&T	0.0	107.2	0.0	5.5								
KX P&T	37.0	400.1	2.4	24.2								
200 West P&T	70.2	748.7	6.4	60.5	142	1707	6533	71380	.23x10 ¹²	2.7x10 ¹²	1.7	34.8
Combined	183.2	2026.8	17.8	182.4	142	1707	6533	71380	.23x10¹²	2.7x10¹²	1.7	34.8
FY2016 KPG	--	2100	--	160	--	1700	--	80000	--	N/A	--	15

Well Drilling by Area	FY2016 Planned	Current Month	FY2016 Cumulative
100-KR-4	3	2	2
100-HR-3	8	1	8
200-UP-1	7	-	2
200-UP-1 Chromium Plume	3	1	1
200-ZP-1 C9521	1	-	1
200-ZP-1 monitoring	2	-	2
M-24 Milestone 100-NR-2	6	2	6
M-24 Milestone C Farm	1	-	1
Vadose Zone	1	-	1
100-F I/U	8	-	8
Total Wells	40	6	32
Site Wide Boreholes	25	2	25

EMS Objectives and Target Status

Objective	Target	Actions	Due Date	Status
16-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.	9/30/16	91%
16-EMS-SGWR-OB2 More effective promotion of EMS	T1 – Promote and increase S&GRP project personnel EMS awareness via various means throughout FY2016.	Present four EMS topics to S&GRP personnel, typically during the S&GRP Monday Tailgate, S&GRP Supervisors' Meeting, or S&GRP All-Hands Meeting.	9/30/16	100%
16-EMS-SGWR-OB3 Promote a more thorough understanding of the regulatory umbrella under which S&GRP conducts operations.	T1 – Promote and increase S&GRP project personnel environmental regulatory awareness via various means, targeting small group settings, throughout FY2016.	Facilitate four regulatory related discussions based on such topical areas as RCRA Permit, CERCLA Decision Documents, Waste Management, Air Permit, etc. These discussions would typically be targeted at smaller S&GRP group settings such as staff meetings, department meetings, PODs, etc.	9/30/16	100%
16-EMS-SGWR-OB4 Reduce the risk of noncompliance with environmental requirements.	T1 – Develop compliance matrices for S&GRP P&T facilities CERCLA RD/RAWPs.	Identify implementing mechanisms and gaps for environmental requirements (i.e., requirement matrices) for the following RD/RAWPs: DOE/RL-96-84, Revision 0 and 0-A, DOE/RL-2006-52, DOE/RL-2006-75, and DOE/RL-2008-78.	9/30/16	80%

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	3	NA
Total Recordable Injuries	0	3	NA
First Aid Cases	2	*47	<ul style="list-style-type: none"> • 8/3/2016 – Employee was stung multiple times on abdomen. The employee reported the bee stings to their supervisor, went to site medical, and were treated for multiple insect bites. (24081) • 8/31/2016 – Performing rad survey, turned around and was stuck by pitchfork. (24109) <p style="text-align: right;">*7 FA cases, PTS in support of RL-0030.</p>
Near-Misses	0	2	N/A

KEY ACCOMPLISHMENTS

RL-0030 Accomplishments

RL-0030.01 RL 30 Operations

Environmental Integration

- Supported RL in the successful negotiation of language to be used in Central Plateau CERCLA documents that embodies the technical approach for addressing a critical component of risk evaluation (Exposure Point Concentration Calculation). Additionally, RL obtained written confirmation from the regulator that this issue is closed for the Central Plateau. This has been an issue that has impeded Central Plateau Work Plan finalization across multiple Operable Units (OU). This is precedence setting for future work in the Central Plateau.

River Corridor

100-HR-3 Operable Unit

- Initiated preparation of the technical memorandum for the five aquifer pumping tests of the Ringold Upper Mud (RUM) unit.
- Completed construction of the eight new wells for the FY2016 P&T optimization performance measure.
- Completed well realignment at all sixteen locations for the FY2016 P&T optimization performance measure.
- Finalized the Tracer Study Work Plan and began evaluation of the historical sulfate concentrations as the initial tracer study.

100-KR-4 Operable Unit

- Completed construction of four new wells for the FY2016 P&T optimization performance measure.
- Completed well realignment activities at six of the eight locations for the FY2016 P&T optimization performance measure.

100-NR-2 Operable Unit

- Completed construction of all six Tri-Party Agreement M-24 Milestone monitoring wells.
- Completed the high river respirometry sampling event for the bioventing remediation system for the 100-NR-1 total petroleum hydrocarbon remedy.
- Initiated D&D of the 100-NR-2 P&T facility.

**300-FF-5 Operable Unit**

- Received agreement from RL and EPA on the Stage B Uranium Sequestration approach. Based on evaluation of the Stage A data, the surface infiltration requirement will be satisfied via injection wells screened into the lower vadose zone rather than applying solution at the surface. In order to assure adequate lateral coverage, the number of injection wells will be increased from the original plan of 27 to 48.

Central Plateau**200-UP-1 Operable Unit**

- Two well drilling campaigns are currently underway. The first is a series of seven remedy monitoring wells, of which, two have been completed and three more are in process. The second is a series of three SE chrome plume wells; one well was completed; two have been drilled and are undergoing completion. A contract was awarded for three additional SE chrome plume wells to be completed in FY2017.

200-BP-5/200-PO-1 Operable Unit

- Completed the installation of an extension to the 200-BP-5 cross-site pipeline from the current extraction well 299-E33-268 to well 299-E33-360 located on the north side of B-Farm.
- Completed resolution of comments from Ecology informal review of the Decisional Draft Action Memorandum (AM); prepared second Decisional Draft AM and submitted for RL Legal review.
- Completed resolution of all but one comment from Ecology review of the Draft A 200-BP-5 Treatability Test Report. The one outstanding comment deals with comparability of the EIS model to the Central Plateau groundwater model used for evaluation of the treatability test.

200-SW-2 Operable Unit

- Obtained Ecology signature on the 200-SW-2 Operable Unit Revision 0 Remedial investigation/feasibility study (RI/FS) Work Plan on August 11, 2016, signifying agreement on the remaining dispute items. The first dispute item, exposure point concentration calculations using ProUCL, was resolved in July. The second dispute item, human direct contact conditional point of compliance language issues, was resolved and formally agreed to with Ecology in August.

200-IS-1 Operable Unit

- Coordinated with RL and Ecology to initiate definition of the specific dispute areas using the issue resolution process being drafted via the process improvement initiative.
- Provided Ecology with both electronic and paper copy of the 200-IS-1 OU Scoping Package (Revision 1 SGW-59881) on August 11, 2016.

200-DV-1 Operable Unit

- Completed sonic drilling at all 22 borehole locations on August 24, 2016.
- Continued monitored natural attenuation analysis. Through August, completed 35 percent of the microbial testing, 15 percent of the isotopic analysis, 49 percent of the geochemical analysis and testing, and 52 percent of the leaching tests.
- Continued hookup of the three perched water wells to the 200 West P&T transfer line. Through August, completed 80 percent of the mechanical construction and connections and 70 percent of the electrical conduit runs and wiring.

200-WA-1 and 200-BC-1 Operable Units

- Submitted the Draft Revision 0 200-WA-1 and 200-BC-1 Operable Units RI/FS Work Plan to RL and EPA for review on August 11, 2016.

200-PW-1 Soil Vapor Extraction

- The 200-PW-1 OU SVE Response Action Report Revision 0 was signed by U.S. EPA on August 11, 2016 and released August 17, 2016.

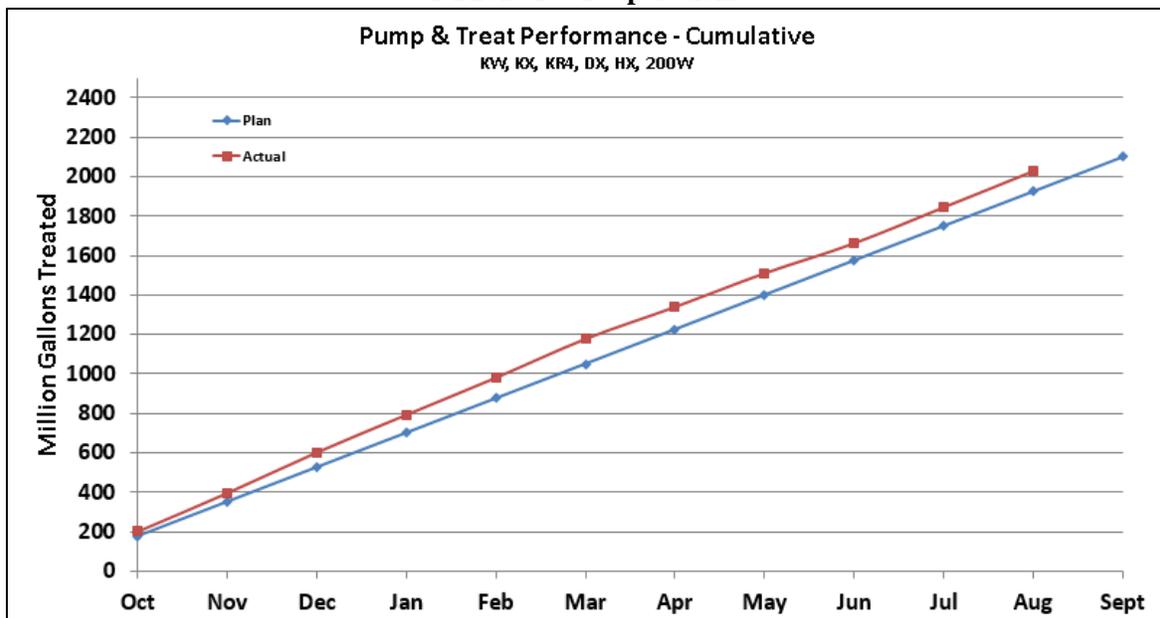
Groundwater P&T Facilities**200 West P&T**

- Operated the 200 West P&T at an average of 1,572 gpm.
- Completed CCD for the tank platforms.

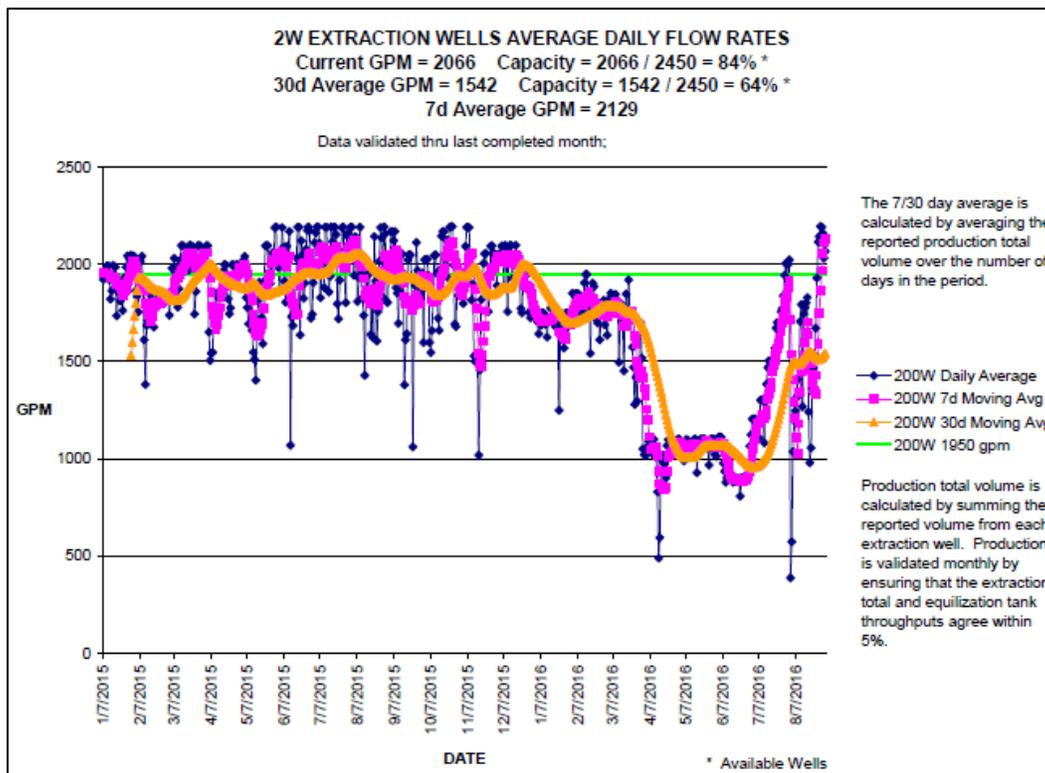
100 Area P&Ts

- Operated the DX P&T at 729 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 305 gpm, below the facility capacity of 330 gpm.
- The KW P&T remains turned off to perform rebound study.
- Operated the KX P&T at 828 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at maximum extraction well capacity. Monthly average at 669 gpm.

FY2016 P&T Operations



200 West P&T



MAJOR ISSUES

Issue:

Received Ecology letter, 16-NWP-116, on June 30, 2016, requiring the 200-SW-2 RI/FS Work Plan incorporate two text modifications or that RL initiate the dispute resolution process. The two issues are associated with 1) exposure point calculation means and methods using EPA ProUCL software and 2) the verbiage associated with the human direct contact conditional point of compliance. Both issues are related to the Principles and Parameters text which were previously agreed to at the Tri-Party Agreement manager level.

Corrective Action:

Coordinate with RL to engage Ecology and EPA management to understand issues and define technical and regulatory correct text updates. Initiate Tri-Party Agreement dispute resolution process should agreement not be reached within the 30 day timeframe.

Status:

Issued closed. Received Ecology signature on the Revision 0 RI/FS Work Plan on August 11, 2016. This will no longer be reported on as a major issue.

Issue:

Experiencing regulatory agency delays in the approval of decision documents, including:

- Ecology extended comment resolution on the 100-N RI/FS Report (DOE/RL-2012-15, Draft A)
- Ecology review of the 200-BP-5 RI/200-PO-1 RI Addendum
- Ecology approval of the 200-IS-1 Tri-Party Agreement change packages (C-013-01), which affect the 200-IS-1 RI/FS Work Plan (DOE/RL-2010-114) scope definition.

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 Concern (NOC) letters to RL as contract activities are impacted. The 200-IS-1 change package dispute will be elevated above the project manager level should agreement not be reached by November 1, 2016.

Status:

Delays in completion of the decision documents are reported weekly to RL management and monthly to RL, EPA, and Ecology senior management. A process improvement meeting using the Kaizen technique was performed in June 2016 with all three agencies. Several of the process improvements identified from these meetings will be deployed in future decision document development. Specific document status includes:

- 100-NR-2: Six new characterization/monitoring wells have been installed in and around the reactor area. The results from these wells will be incorporated into the remedial investigation report. Discussions are underway to implement some of the process improvements that were identified in the Kaizen meetings to help complete the associated feasibility study which is planned for October/November timeframe.
- 200-BP-5/200-PO-1: Ecology suspended review of the 200-BP-5 RI report and the 200-PO-1 RI report addendum on October 23, 2015 (15-NWP-189). Completion of this review is contingent on RL providing “adequate details” on how the modeling approach evolved from the Tank Closure & Waste Management Environmental Impact Statement (TC&WM EIS) modeling approach with a list

of specific items to be provided. This issue has been elevated to RL senior management for resolution.

- 200-IS-1: Ecology continues to review change package C-13-01, which was provided on December 19, 2015. Initiated an informal issue resolution at the project level during the August 17, 2016, bi-weekly RL/Ecology team meeting. Received RL and Ecology agreement on August 18, 2016, to extend the change control form M-15-13-02 dispute to November 1, 2016.

Issue:

Based on groundwater samples taken during drilling from the first set of three wells, the 200-UP-1 southeast chromium plume extends further to the southeast than previously mapped, and will likely require additional characterization wells (beyond the six wells planned) to define the southern plume boundary. This additional characterization will impact completion of TPA Milestone M-016-193 to complete the remedial design investigation of the SE chromium plume by September 30, 2017.

Corrective Action:

Two corrective actions have been identified:

1. Implement actions to define the southeast chromium plume. The two southern-most characterization wells drilled to date will be prioritized and resampled to confirm chromium concentrations. Five existing groundwater monitoring wells to the south of the plume will be sampled to help establish extent of the plume and locate additional characterization wells. Cultural reviews for six potential well locations will be prepared to help define the southern extent of the plume. The results from these additional samples will be used to define the need for additional characterization wells.
2. Meet with EPA and adjust the due date for TPA Milestone M-016-193.

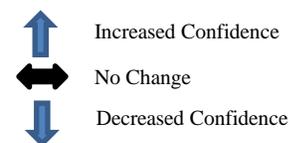
Status:

One of the two characterization wells has been completed and will be sampled in September. A walk down was performed on the existing five wells and identified that two wells are accessible. The remaining three wells are within a contamination area and will require radiological survey prior to entry. MSA continues to work the cultural review for the new well locations. Initiated planning for three additional chromium characterization wells to be installed in FY2017.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
Explanation of major changes to the project monthly spotlight chart:										
No major changes to the risk spotlight chart in the month of August .										
Realized Risks (Risks that are currently impacting project cost/schedule)										
OPPORTUNITY: SGW-007A: Sampling Requirement Reduction	Reduction in field sampling (locations, frequency, or total number of samples collected) has the opportunity to reduce long-term groundwater monitoring cost. Risk Handling Strategy: Exploit Probability: Very Likely (>90%) Worst Case Impacts: \$1 million, 0 day	●	↔	Opportunity Event: The <i>Optimization Plan to Revise the Groundwater Sampling Plan</i> is final and provides the roadmap to revise all groundwater SAPs over the next two years. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="text-align: center;">Opportunity action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Obtain Agency approval of the revised SAPs.</td> <td style="text-align: center;">10/30/16</td> <td style="text-align: center;">75</td> </tr> </tbody> </table> Opportunity Assessment: All ten CERCLA groundwater monitoring SAPs have been revised and transmitted to RL and the regulators. Seven of the ten CERCLA SAPs are approved by RL and the Agencies, and are either implemented or in the process of being implemented. Comment resolution with the Agencies is on-going for two CERCLA SAPs (200-BP-5 and 200-PO-1). The revised 100-KR-4 SAP was transmitted to EPA by RL on July 21, 2016 and comments are due in September . All 25 RCRA monitoring plans have been reviewed and of these, 13 plans required no changes. The remaining 12 monitoring plans were revised and transmitted to Ecology for review. Comments have been received from Ecology. Four monitoring plans have been revised and implemented, and the remaining eight plans are in final comment incorporation. CHPRC is planning to complete and implement six groundwater monitoring plans by the end of the fiscal year and the remaining by the end of the calendar year. In August 2016, the following RCRA documents were finalized and, when directed by RL, will be implemented: 1. LLBG-1 (DOE/RL-2009-75, Rev. 1) 2. Non-radioactive Dangerous Waste Landfill (NRDWL, DOE/RL-2015-32, Rev. 0) 3. 183-H Solar Evaporator (DOE/RL-2015-Rev. 0) 4. 300 Area Process Trenches (DOE/RL-2015-29-Rev. 0) Monitoring under the new AEA plan has been implemented. No alternative course of actions are needed at this time.	Opportunity action(s)	FC Date	%	Obtain Agency approval of the revised SAPs.	10/30/16	75
Opportunity action(s)	FC Date	%								
Obtain Agency approval of the revised SAPs.	10/30/16	75								
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No critical risks identified in the month of August .										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
No high risks identified in the month of August .										
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of August .										

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	8.7	9.8	10.0	1.2	13.7%	-0.1	-1.2%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (+\$1.2M/+13.7%)

The positive schedule variance resulted from the following:

- Overall positive schedule variance in drilling experienced by:
 - Positive performance made on the ongoing 200-UP-1 monitoring well drilling campaigns, including recovery of drilling of FY2015 and FY2016 baselined campaigns to support Tri-Party Agreement MS M-016-193.
 - Schedule recovery underway on the M-24 six 100-NR-2 monitoring well campaign planned in FY2015. In August the project completed construction of the remaining two wells.
 - In August, scope to drill treatability test wells was re-planned from FY2015 to FY2017/FY2018 to reflect a delay in the start of work until FY2017. This change request re-planned the start of the URGS treatability test well drilling from to align with the remaining treatability test scope.
- Continued to recover schedule variance in the 200-DV-1 OU by completing sonic drilling of characterization boreholes and activities performed to hookup the three perched water wells to the 200 West P&T transfer line.
- The CM positive schedule variance is offset in part by performance earned ahead of schedule for drilling 100-FR-3 final remedy monitoring wells returning to zero.

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

- The current month cost variance is within reporting thresholds.

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)	Variance at Completion (VAC)
Total	1,271.8	1,259.8	1,230.7	(12.0)	-0.9%	29.1	2.3%	1,564.9	1,489.8	75.1

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$12.0M/-0.9%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$29.1M/+2.3%)

The variance is within reporting thresholds.



Variance at Completion (+\$75.1/+4.8%)

The variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0030 Soil and Groundwater Remediation	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	127.5	118.1	9.3
Incremental Scope Pending Change Management	0.0	0.6	(0.6)
RL-0030 –Total	127.5	118.8	8.7

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

PBS RL-0030 FY2016 expected funding remains at \$127.5 million. The FYSF of \$118.8 million includes actions anticipated to meet funding targets.

Critical Path Schedule

Critical path analysis can be provided upon request.

Baseline Change Requests

BCR-030-16-038R0, *Revise Method of Performance for Composite Analysis Activities*

BCR-030-16-039R0, *Consolidate Perched Water Annual Report and Project Management Activities*

BCR-030-16-040R0, *Definitization of CO #303, BC-5 AWLN*

BCR-030-16-041R0, *Defer Unfunded Work Activity from FY2017 to FY2018*

BCR-030-16-042R0, *Re-Plan PBS 030 PM Activities to Address EVM Co-Mingling*

BCR-030-16-043R0, *Defer Unfunded 200-DV-1 Treatability Test Well-Drilling*

BCRA-PRC-16-049R0, *HPIC Updates August 2016*

BCR-PRC-16-048R0, *Revision to Calendars for FY2017 and FY2018 – Operations*

MILESTONE STATUS

Tri-Party Agreement milestones represent significant achievements in project execution. Enforceable Tri-Party Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key activities. The PMB Annual Update, implemented in September 2013, and subsequent approved BCRs define CHPRC planning with respect to Tri-Party Agreement milestones. A Tentative Agreement for Tri-Party Agreement Milestone series M-015, M-016,

M-037, M-085 and M-094 was signed on October 26, 2015, and the final approval package was signed on May 25, 2016. 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 in Dispute					
M-015-112	Submit Draft B, 200-IS-1 Operable Unit Pipeline System Waste Sites RFI/CMS/RI/FS Work Plan to Ecology	2/28/14		TBD	Dispute resolution extended to November 1, 2016 (TPA change control form M-15-13-02).
Milestones on Schedule or at Risk					
M-015-79	Submit RI/FS Report/PP for 100-BC-1/2/5 OUs for GW & Soil	12/15/16		12/15/16	On schedule
M-016-110-T03	Contain the Strontium-90 GW plume at the 100-NR-2 OU	12/31/16		4/30/21	At risk, unable to accomplish work due to Traditional Cultural Property
M-024-58J	Initiate Discussions of Well Commitments	6/1/17		6/1/17	On schedule
M-024-68-T01	Conclude Discussions of Well Commitments	8/1/17		8/1/17	On schedule
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	9/30/17		9/13/17	On schedule
M-016-193	Complete the remedial design investigation of the SE chromium plume, including the installation of new wells and evaluation of the GW monitoring data and install monitoring wells needed for remedy performance monitoring as defined in the UP-1 RD/RA WP.	9/30/17		9/30/17	At risk, schedule extension discussion underway

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

Section E

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



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation
(KBO&PR)

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The project completed field isolation (Cold and Dark) of 2710S. The project completed final waste disposition of 275-EA and completed remainder of the Pu Bag Removal preparatory entries.

EMS Objectives and Target Status

None currently identified.

TARGET ZERO PERFORMANCE

	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	1	6	<ul style="list-style-type: none"> 8/1/2016 – Employee was performing radiation surveys of outdoor WIDS sites on railroad track. Tripped on a rail spike, stumbled and fell onto the railroad track. Employee struck his left knee on the railroad and fell on both forearms. He was diagnosed with a contusion of the left knee, wrapped with a cold compress and released to work without restrictions. (24078)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0040 Accomplishments

- Operations/Maintenance:
 - Completed final waste disposition of 275-EA.
 - Supported Deactivation, Decommission, Decontamination, and Demolition (D4) demolition preps for 2710S.
 - Performed mock up on a Negative Air Mover at REDOX.
 - Completed U-Plant exterior surveillance.
 - Completed field isolation (Cold and Dark) of 2710S.
 - Supported demolition of 2711S and 2718S.
 - Conducted 82 radiological facility surveillances. 165 Surveys performed year-to-date.
 - Conducted 30 PM activities.
- Continued Progress on Canyon Stabilization Documents:
 - REDOX Fire Hazard Analysis (FHA) was finalized and issued to RL.
 - Plutonium Uranium Extraction Plant (PUREX) FHA was sent for internal review.
 - 276BA Closure plan comment resolution began; RCR comment responses prepared.

- o Removal Action Work Plan (RAWP) for 242-B/BL and 276C was completed and sent to internal reviewers.
- o RAWP for PUREX ancillaries (203A and 211A tank farms) was sent to RL for review.
- o Resolution of EE/CA authority issues tentatively resolved; pending further information submitted.
- o Action memorandums for the three canyons were drafted and submitted for CHPRC review.
- Suspect Plutonium Nitrate Bags:
 - o Completed mockup testing of confinement/containments bags and obtained final designed bags.
 - o Completed remainder of Pu Bag Removal preparatory dives; next dives implement the Pu Bag Removal Work Package.
 - o Completed draft of Pu Nitrate Bag removal work package; HRB set for September 1, 2016.
- Demolish REDOX Ancillary Facilities:
 - o Completed demolition of REDOX buildings 2711S and 2718S.

PTS Accomplishments

- None identified at this time.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

<p>Unassigned Risk Risk Passed New Risk Change</p>	<ul style="list-style-type: none">  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
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0040/WBS-040				
Explanation of major changes to the project monthly stoplight chart:				
No major changes to the monthly stoplight chart in the month of August .				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of August .				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in the month of August .				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
Lifecycle Risk Triggers (Risk could be realized at any point of the project)				

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0040/WBS-040										
D4-064: Aging Building Systems/ Components	Problems with aging building systems/ components (e.g., roofing/structures, etc.) result in inoperability or requires unscheduled maintenance/ outages, resulting in cost impacts. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$2 million, 0 day	●	↔	<p>Risk Trigger Metric: During routine surveillance activities unforeseen events cause systems to be compromised. This is a lifecycle risk and will continue through the CHPRC (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: <i>No changes in the month of August.</i> During monthly routine surveillance activities it was identified that this risk was triggered based on several events with the PUREX Stack Sample System (i.e., bearing sheaves, belt replacement, damper repairs, heat trace failure, and sample line damaged). A conceptual design has been provided to RL with an estimate for replacing the entire PUREX stack sample system. With this data, RL will be able to provide PRC direction on how to proceed, including the potential for a change proposal.</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 August.										

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	2.1	1.8	2.1	(0.3)	-12.6%	(0.2)	-13.4%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance: (-\$0.3M/-12.6%)

The schedule variance is within reporting thresholds.

CM Cost Performance: (\$-0.2M/-13.4%)

The cost variance is within reporting thresholds.

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)	Variance at Completion (VAC)
Total	422.7	418.9	387.9	(3.8)	-0.9%	31.0	7.4%	472.5	445.9	26.6

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance: (-\$3.8M/-0.9%)

The schedule variance is within reporting thresholds.

CTD Cost Performance: (+31.0M/+7.4%)

The favorable cost variance is due to prior year activity that has been previously reported including:

- The majority of the CTD Cost Variance is from legacy work dating back to the ARRA time period.
- The remaining CTD favorable cost variance in base-funded work is due to efficiencies for Surveillance and Maintenance and D4 activities as a result of utilization of existing site equipment and less resources and Program Management utilizing less resources.

Variance at Completion (+\$26.6M/+5.6%)

The favorable Variance at Completion is due to under runs in the Waste Identification Form (WIF) Development, Cold and Dark, and Demolish 212N, 212P, and 212R Projects during the ARRA Project. Efficiencies were gained by combining these activities into the D4 activities thus reducing overall resource requirements.

Contract Performance Report Formats are provided in Appendix A.

**FUNDS vs. SPEND FORECAST
(\$M)**

WBS 040/RL-0040 Nuclear Facility D&D	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
Spending Forecast	26.5	21.6	4.9
Incremental Scope Pending Change Management	0.0	0.9	(0.9)
RL-0040 – Total	26.5	22.5	4.0

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

There is no change in direct funds for August. The FYSF decreased by \$1 million from July to August.

Critical Path Schedule

Critical path analysis can be provided upon request.

Baseline Change Requests

- BCR-PRC-16-048R0, *Revision to Calendars for FY2017 and FY2018 – Operations*
- BCR-PRC-16-050R0, *Undistributed Budget Adjustments August 2016*
- BCRA-PRC-16-049R0, *HPIC Updates August 2016*

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. DOE 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 subsequent 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-016-250b	Submit to ECY a 3-year rolling prioritized schedule to implement waste site removal actions	3/31/2017		3/31/2017	On Schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

Section F

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



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation
(KBO&PR)

M. A. Wright
Vice President for
Project Technical
Services

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Prepared for successful transition of RCCC scope to CHPRC, August 29, 2016. Prepared for the RCCC scope baseline change proposal submittal to DOE-HQ. DOE-HQ Independent Cost Estimate (ICE) Reviews completed successfully on August 4, 2016. Completed CHPRC Project Review Board (PRB) in early August, 2016. Preparations and support continued for DOE-HQ External Independent Review (EIR) actions/activities on PMB/CP submittals – EIR scheduled for week of September 12, 2016. Continued with 100K waste site remediation and 165KE asbestos abatement, and 300-296 design for 324 facility and mockup facility.

EMS Objectives and Target Status

None currently identified.

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	0	7	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0041 Accomplishments

- 165KE Asbestos Abatement:
 - o Work continued on thermal system piping insulation removal above the main deck and Negative Pressure Enclosure installation in the lower boiler room. The lower boiler room has been cleaned, sprayed with fixative, and horizontal surfaces are being covered in plastic sheeting including two layers of plastic on the lower boiler room floor.
- Area AB waste site remediation:
 - o Excavation on 16 out of the 18 total chemical wastes in 100-K Waste Site Area AB has been completed with the RL approved \$3 million NTE/NTP.
 - o In-process samples have been taken on waste sites 126-KE-2, 100-K-14, 100-K-50 and 1607-K2; and, work instructions have been provided to EPA for review and approval.
- RCCC Transition:
 - o DOE-HQ ICE Reviews completed successfully on August 4, 2016.
 - o Completed CHPRC PRB in early August 2016.
 - o Preparations and support continued for DOE-HQ EIR actions/activities on PMB/CP submittals – EIR scheduled for week of September 12, 2016.

- o Completing Post-Transition Item Checklist & Due Diligence process for all sites.
- 300-296 Accomplishments:
 - o Submitted Change Order 305 to RL.
 - o Delivered final project and technical information to support the DOE HQ EIR.
 - o Delivered a 300-296 Project presentation to RL senior executives.
 - o Conducted familiarization tours of Mockup Facility and 324 building for congressional staff and EIR team representatives.
 - o Achieved significant progress in building the project team staff (engineering and project controls).
 - o Issued PRC-SRP-00003, Design Review Report for Transition of 300-296 Waste Site Remediation Project (Design Gap Analysis).
 - o Issued Kurion contract for design work related to Gap Analysis findings and completed a series of kickoff meetings.

PTS Accomplishments

- **300-296 Soil Remediation:**
 - o Completed input to baseline planning and estimating efforts for FY2017 scope.
 - o Continued planning efforts for interference removal and cell sealing.
 - o Progressing infrastructure design at 324 mockup facility site and a the 324 building.
 - o Meeting held with AREVA to address infrastructure plans at the mockup facility- no objections raised from AREVA, City of Richland meeting scheduled for week of August 29.
 - o Completed relocation of test equipment from ENW warehouse to the 324-mockup facility.
 - o Commenced ground scanning around 324 building in support of the N access ramp design.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

- ↑ Increased Confidence
- ↔ No Change
- ↓ Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0041/WBS-041										
Explanation of major changes to the project monthly spotlight chart:										
No major changes to the monthly spotlight chart in the month of August .										
Realized Risks (Risks that are currently impacting project cost/schedule)										
No realized risks for the month of August .										
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No critical risks identified in the month of August .										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
Lifecycle Risk Triggers (Risk could be realized at any point of the project)										
KBC-002: Subcontract Change Orders/Claims	Subcontracts for D4, soil remediation, and other field support services require revision based on discovery of changed conditions or completion requirements resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$1.5 million, 66 days	●	↔	Risk Trigger Metric: Field condition changes, including but not limited to, the amount of waste containers provided for soil remediation on a daily basis. Additional field changes include the need to excavate a greater amount of soil than planned to complete remediation. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <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>None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Mitigation Assessment: 100K AB Waste Site Area Remediation: RL has issued CO 307 with a \$3 million NTE authorizing CHPRC to continue AB Waste Site Area soil remediation. CHPRC is preparing a change proposal to continue soil remediation in the 100K area during FY2016 and FY2017. 165 KE Power House Asbestos Remediation: Due to competing priorities at RL-0011 and RL-0040, craft personnel numbers have not been sufficient to maintain an acceptable production rate. Current plans are to send insulators and the Field Work Supervisor (FWS) to PFP in early October, to support higher priority work, at which time project management will demobilize and stop work on 165 KE asbestos removal.	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 August .										

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	1.6	1.4	3.1	(0.1)	-8.9%	-1.7	-115.4%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$0.1M/-8.9%)

The current month favorable schedule variance is within reporting thresholds.

CM Cost Performance (-\$1.7M/-115.4%)

The current month negative cost variance is primarily due to performing waste site remediation activities as authorized by CO 307, 100K Area Waste Site Quantity Increase. Actual costs were incurred for performing this scope with no offsetting earned value (-\$1,665K). A BCR is planned for September 2016 implementation that will add budget associated with CO 307. 165KE continues to experience inefficiencies due to craft resources being re-assigned to higher priority scope and the resulting ramp down (-\$190K). The 300-296 Project has experienced delays in awarding the contract to support final design (effected award August 24), resulting in no earned value, while actual costs continue to be charged. Project staff are working on design for the mockup facility, 324 structural modifications and mockup equipment based upon authorization received in CO 305 (-\$526K). A BCR is planned for September 2016 implementation that will add budget associated CO 305. These negative cost variances are offset by efficiencies associated with shared resources in the areas of 100K Minimum Safe, 100K Project Support and 324 Minimum Safe and RCCC Transition (\$731K).

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)	Variance at Completion (VAC)
Total	335.6	345.0	315.0	9.4	2.8%	30.0	8.7%	415.2	366.6	48.6

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$9.4M/+2.8%)

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$30M/+8.7%)

The positive cost variance is primarily the result of prior year activity that have been previously reported and Confirmatory Sampling No Action (CSNA) waste sites that were completed early and under cost. In addition, less demolition was required for the KE Sedimentation Basin and there were underruns in G&A and Direct Distributable costs. This was partially offset by the cost overruns in prior years for the Utilities Project.

Variance at Completion (+\$48.6M/+11.7%)

The Variance at Completion is primarily due to 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	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	40.0	27.3	12.7
Incremental Scope Pending Change Management	0	6.7	(6.7)
RL-0041 - Total	40.0	34.0	5.9

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis:

There was no change in project funding in August. The FYSF decreased by \$1.6 million primarily due less actual costs realized during August than projected (-\$1.2 million) in the areas of 100K Minimum Safe/Project Support Cots, 324 Minimum Safe and RCCC Transition Implementation and 300-296 Remediation. In addition, both the 300-296 and 324 Minimum Safe September forecasts were decreased based upon August spending.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Baseline Change Requests

BCR-041C-16-028R0, Revision to Calendars for FY2017 and FY2018 – RL-0041

BCR-041C-16-022R0, Defer Unfunded Work Activity for 100K Zone Closure

BCR-041C-16-023R0, PBS RL-0041 Undistributed Budget Adjustments August 2016

BCRA-PRC-16-049R0, HPIC Updates August 2016

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

Section G

Fast Flux Test Facility Closure (RL-0042)



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation
(KBO&PR)

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The Fast Flux Test Facility (FFTF) is being Safe & Compliant in a low-cost surveillance and maintenance condition.

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

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

KEY ACCOMPLISHMENTS

RL-0042 Accomplishments

- Completed 400W one-month Extinguisher Inspection.
- Completed 400 Area one-month Valve and Gauge Inspection.
- Completed weekly exterior inspection of water Tank (FIRE).
- Completed one-month inspection of Water Tank.
- Completed monthly Ground-fault Circuit Interrupter (GFCI) testing.
- Completed lubrication of P-16 Pump.
- Completed weekly valve inspection.
- Worked 481 Scaffold build.
- Completed Weekly Fire Pump P-28 Operational Check (FIRE).
- Completed one-month Fire Pump P-27 Ops Check (FIRE).
- Completed removal of lead paint in support of Ultrasonic test (UT) and internal inspection of 4-inch pipe.
- Completed walk-down of 481 Pump House with Tank Waste Projects (TWP) for Replacing Water System Pressure Chart Recorder.
- Completed 400 Area calibration of PI-68018, PI-68019, 60820, 68022.
- Completed 400Area three-month chemical inventory.
- Completed Inspection of P-26 Fire Pump.
- Continuing work to validate procedure for K Line Circuit Breaker Maintenance/Testing.
- Continued efforts in support of 400 Area Sink Hole Investigation.

PTS Accomplishments

- None identified at this time.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0042/WBS-042				
Explanation of major changes to the project monthly stoplight chart:				
No major changes to the risk profile for the month of August .				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of August .				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in the month of August .				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high threat value risks identified in the month of August .				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in the month of August .				

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	0.2	0.2	0.1	(0.0)	-2.6%	0.0	27.4%

Numbers are rounded to the nearest \$0.1M

CM Schedule Performance: (-\$0.0M/-2.6%)

The schedule variance is within reporting thresholds.

CM Cost Performance: (+\$0.0M/+27.4%)

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)	Variance at Completion (VAC)
Total	21.9	21.9	17.8	0.0	0.0%	4.1	18.7%	26.5	22.8	3.7

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/+18.7%)

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

Variance at Completion (+\$3.7M/+13.9%)

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	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
Spending Forecast	3.2	1.8	1.5
Incremental Scope Pending Change Management	0	0	0
RL-0042 – Total	3.2	1.8	1.5

Numbers are rounded to the nearest \$0.1 million

Funds Analysis

Projected Funding remains unchanged from last month. The FYSF had no change in August 2016.

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.

Baseline Change Requests

BCR-PRC-16-048R0, *Revision to Calendars for FY2017 and FY2018 – Operations*

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

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



August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

**CONTRACT PROGRAM MANAGEMENT REPORT
FORMAT 1 - WORK BREAKDOWN STRUCTURE**

DOLLARS IN Thousand of \$ PENDING UPDATE TO 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) 2016 / 07 / 25		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2016 / 08 / 21		
		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 5,580,977	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 24,646	d. TARGET PROFIT/FEE 241,228	e. TARGET PRICE 5,822,205	f. ESTIMATED PRICE 5,665,676	g. CONTRACT CEILING 5,822,205	h. ESTIMATED CONTRACT CEILING 5,665,676	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 Manager
a. BEST CASE 5,359,182						c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)
b. WORST CASE 5,433,878									
c. MOST LIKELY 5,424,448		5,605,623		181,175					

8. PERFORMANCE DATA																		
CAPN.PBS	CURRENT PERIOD						CUMULATIVE TO DATE						REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL		VARIANCE		BUDGETED COST		ACTUAL		VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)								
ITEM (1)																		
RL-0011 Nuclear Mat Stab & Disp PFP	5,488	2,733	9,252	-2,755	-6,520	957,261	903,380	933,491	-53,880	-30,110	0	0	0	0	980,372	1,036,404	-56,032	
RL-0012 SNF Stabilization & Disp	7,187	6,017	5,541	-1,170	476	613,870	614,626	589,940	757	24,686	0	0	0	738,628	711,981	26,647		
RL-0013 Solid Waste Stab & Disp	8,727	8,918	8,727	191	191	1,078,310	1,078,588	1,011,519	277	67,068	0	0	0	1,341,196	1,284,700	56,497		
RL-0030 Soil & Water Rem-Grndwtr/Vadose	8,656	9,839	9,957	1,182	-119	1,271,821	1,259,838	1,230,694	-11,983	29,145	0	0	0	1,564,010	1,488,882	75,127		
RL-0040 Nuc Fac D&D - Remainder Hanfrd	2,087	1,825	2,070	-262	-245	422,675	418,863	387,903	-3,812	30,960	0	0	0	469,135	442,530	26,605		
RL-0041 Nuc Fac D&D - RC Closure Proj	1,570	1,430	3,080	-140	-1,650	335,601	344,969	314,974	9,368	29,995	0	0	0	405,893	357,273	48,620		
RL-0042 Nuc Fac D&D - FFTF Proj	164	160	116	-4	44	21,929	21,935	17,843	5	4,091	0	0	0	26,468	22,800	3,667		
b. COST OF MONEY	0	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	0	
d. UNDISTRIBUTED BUDGET															14,613	14,613	0	
e. SUBTOTAL	33,879	30,921	38,743	-2,957	-7,822	4,701,467	4,642,200	4,486,364	-59,267	155,836	0	0	0	5,540,313	5,359,182	181,131		
f. MANAGEMENT RESERVE															65,266			
g. TOTAL	33,879	30,921	38,743	-2,957	-7,822	4,701,467	4,642,200	4,486,364	-59,267	155,836	0	0	0	5,605,579				
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																		
a. VARIANCE ADJUSTMENT										0								
b. TOTAL CONTRACT VARIANCE										-59,267		155,836		5,605,579 5,359,182 246,396				

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

**CONTRACT PROGRAM MANAGEMENT REPORT
FORMAT 2 - ORGANIZATIONAL CATEGORIES**

DOLLARS IN Thousand of \$ PENDING UPDATE TO 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) 2016 / 07 / 25		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2016 / 08 / 21		
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO X YES (YYYYMMDD) 2009 / 09 / 18					

WBS.Resp Org Group WBS.Resp Org Code 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	569	631	525	62	106	63,588	63,700	59,139	112	4,562	0	0	82,402	79,915	2,487		
340 - Environmental Prog & Regl Mgt	569	631	525	62	106	63,588	63,700	59,139	112	4,562	0	0	82,402	79,915	2,487		
35 - Business Services	0	0	0	0	0	472,524	472,524	448,488	0	24,036	0	0	472,524	448,488	24,036		
36K - Support to PRC Finance	0	0	0	0	0	472,524	472,524	448,488	0	24,036	0	0	472,524	448,488	24,036		
36 - Prime Contract & Proj Integr	237	237	111	0	126	4,772	4,772	2,462	0	2,310	0	0	8,426	6,175	2,252		
365 - Perf Assess & Risk Mgmt	237	237	111	0	126	4,772	4,772	2,462	0	2,310	0	0	8,426	6,175	2,252		
3B - PFP Closure Project	5,434	2,679	9,242	-2,755	-6,563	870,077	816,196	854,148	-53,880	-37,952	0	0	893,113	956,767	-63,655		
36V - Matrixed to PFP	0	0	0	0	0	4,822	4,822	5,328	0	-507	0	0	4,822	5,328	-507		
3B0 - PFP Close/BOSS D&D & Infrastruc	0	0	0	0	0	134	134	116	0	18	0	0	134	119	15		
3B3 - Project Management/Subcontracts	440	888	4,740	448	-3,852	384,246	371,069	400,219	-13,177	-29,150	0	0	385,530	425,855	-40,325		
3B4 - Engrg Nuc Saf Plng&Wrk Control	4,418	1,080	1,690	-3,338	-611	101,214	62,907	69,774	-38,307	-6,866	0	0	120,429	112,746	7,684		
3B7 - Environmental & Waste	553	669	1,046	116	-378	71,213	69,859	58,452	-1,354	11,408	0	0	73,516	78,157	-4,641		
3BA - Project Mgmt D&D	24	24	1,686	0	-1,662	222,664	222,664	208,949	0	13,715	0	0	222,744	222,626	117		
3BB - PFP D4 Deputy Project Mgmt	0	19	79	19	-60	85,784	84,741	111,310	-1,043	-26,569	0	0	85,939	111,936	-25,997		
3C - Waste & Fuels Management Project	9,419	9,641	9,064	222	577	973,043	973,287	905,241	244	68,046	0	0	1,236,384	1,178,416	57,968		
3C0 - Waste & Fuels Management Proj	2,353	1,661	1,752	-692	-91	19,503	17,037	18,483	-2,466	-1,446	0	0	23,562	20,775	2,787		
3CE - Fuels Facilities	1,841	1,883	1,704	43	179	96,770	96,462	97,983	-308	-1,521	0	0	129,191	134,225	-5,034		
3CF - Waste Disposition	2,700	3,753	3,418	1,052	335	433,752	438,680	407,398	4,927	31,282	0	0	530,474	498,510	31,964		
3CG - W&FMP Projects & Strategic Programs	434	288	527	-146	-238	207,241	206,734	184,571	-507	22,163	0	0	277,097	284,607	-7,510		
3CH - Maintenance & Waste Integration	0	0	0	0	0	0	0	0	0	0	0	0	2,626	2,529	97		
3CK - W&FMP Business Services	2,091	2,055	1,663	-35	392	215,778	214,374	196,806	-1,404	17,568	0	0	273,436	237,771	35,664		
3D - Soil & Groundwater Remediation	8,029	9,149	9,393	1,121	-244	1,108,709	1,096,614	1,065,809	-12,095	30,805	0	0	1,380,819	1,302,022	78,797		
3D0 - Soil & Groundwater Remediation	1,148	1,156	885	9	271	103,822	103,822	97,535	0	6,288	0	0	139,589	121,277	18,312		
3D2 - GW Remediation Support	1,103	1,870	1,919	766	-49	216,643	215,959	200,851	-684	15,108	0	0	285,064	268,513	16,550		
3D4 - GW Operations	3,312	3,197	2,797	-115	400	232,814	232,868	212,086	54	20,782	0	0	317,114	276,245	40,868		
3D8 - GW Analysis and Reporting	2,466	2,926	3,792	460	-866	555,431	543,965	555,338	-11,466	-11,373	0	0	639,053	635,986	3,067		
3G - K Basin Oper & Plateau Remediation Project	10,191	8,584	10,409	-1,607	-1,825	1,208,754	1,215,106	1,151,077	6,352	64,030	0	0	1,452,032	1,372,787	79,246		
32X - Support to STP	112	139	83	27	56	8,426	8,320	8,266	-107	53	0	0	12,211	10,577	1,634		
38Z - Support to STP	2,819	2,756	2,170	-63	586	113,293	113,739	106,485	446	7,254	0	0	146,175	142,816	3,359		
3CX - support to 3G 100K Area Project & BOS D&D	0	0	0	0	0	13,577	13,577	18,217	0	-4,640	0	0	13,577	18,217	-4,640		
3G0 - K Basin Oper & Plateau Remediation Project	251	212	711	-39	-499	3,598	3,311	4,320	-288	-1,009	0	0	3,634	4,303	-669		
3G1 - STP / 100K	1,833	765	909	-1,068	-144	177,234	177,895	169,873	661	8,022	0	0	196,388	188,831	7,557		
3G2 - CPS&M / D4	2,811	2,414	4,171	-398	-1,757	599,047	604,930	565,537	5,883	39,394	0	0	717,120	665,242	51,878		
3G3 - Project Office	620	620	762	0	-142	106,507	106,507	100,640	0	5,866	0	0	125,186	114,701	10,486		
3G4 - ESHQ&R	0	27	0	27	27	34,273	34,301	27,342	27	6,958	0	0	35,900	28,448	7,452		
3G8 - 100 K Operations	1,744	1,651	1,602	-93	49	152,799	152,528	150,396	-271	2,132	0	0	201,841	199,652	2,188		
b. COST OF MONEY	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		
d. UNDISTRIBUTED BUDGET													14,613	14,613	0		
e. SUBTOTAL (Performance Measurement Baseline)	33,879	30,921	38,743	-2,957	-7,822	4,701,467	4,642,200	4,486,364	-59,267	155,836	0	0	5,540,313	5,359,182	181,131		
f. MANAGEMENT RESERVE													65,266				
g. TOTAL	33,879	30,921	38,743	-2,957	-7,822	4,701,467	4,642,200	4,486,364	-59,267	155,836	0	0	5,605,579				

CLASSIFICATION (When Filled In)

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 d. YES X 9/18/2009				4. REPORT PERIOD a. FROM: 2016/07/25 b. TO: 2016/08/21				
5. CONTRACT DATA																
a. ORIGINAL NEGOTIATED COST 4,312,366				b. NEGOTIATED CONTRACT CHANGE \$1,268,611		c. CURRENT NEGOTIATED COST (A + B) \$5,580,977		d. ESTIMATED COST AUTH UNPRICED WORK \$24,646		e. CONTRACT BUDGET BASE (C + D) \$5,605,623		f. TOTAL ALLOCATED BUDGET \$5,605,579		g. DIFFERENCE (E - F) \$44		
h. CONTRACT START DATE 6/19/2008				i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2018		k. CONT COMPLETION DATE 9/30/2018				l. EST COMPLETION DATE 9/30/2018				
6. PERFORMANCE DATA																
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)						UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)
			+1 Sep-16 (4)	+2 Oct-16 (5)	+3 Nov-16 (6)	+4 Dec-16 (7)	+5 Jan-17 (8)	+6 Feb-17 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)		
a. PM BASELINE (BEGIN OF PERIOD)	4,667,589	32,050	43,548	35,087	33,290	36,428	29,200	32,685	3,391,477	391,653	471,323	488,734	414,164	360,434	8,413	5,526,198
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																
BCR-011C-16-011R0 - Revision to Calendars for FY2017 and FY2018 - PFP CAP 2												(21)	22			2
BCR-011C-16-012R0, MR Draw PRF Glovebox Removal												1,153	279			1,432
BCR-012-16-029R0 - Definitization of CO 301 100-KW Sand Filter Media Remediation												27				27
BCR-012-16-030R0 Definitization of CO 300 100-KW Garnet Filter Remediation												144	155			298
BCR-012C-16-028R0 - Revision to Calendars for FY2017 and FY2018 - STP CAP												(13)	19	(6)		0
BCR-013-16-028R0 Definitization of CO #269 K3 Ventilation and Stabilization												4,841	1,206			6,047
BCR-013C-16-029R0 - Convert Project Mgmt Scope for W135 Planning Packages to Work Packages													(251)	251		0
BCR-030-16-040R0 - Definitize CO# 330, BC-5 AWLN													74	33		108
BCR-030-16-041R0 - Defer Unfunded Work Activity from FY2017 to FY2018													(134)	134		0
BCR-030-16-043R0 - Re-Plan DV-1 Treatability Test Well-Drilling													(716)	117	598	0
BCR-041C-16-022R0 - Defer Unfunded Work Activity for 100K Zone Closure													(283)	283		0
BCR-PRC-16-048R0 - Revision to Calendars for FY2017 and FY2018 - Operations													(73)	74		2
BCR-PRC-16-050R0, Undistributed Budget Adjustments August 2016															4,200	4,200
BCR-041C-16-023R0 - PBS RL-041 Undistributed Budget Adjustments August 2016															2,000	2,000
c. PM BASELINE (END OF PERIOD)	4,701,467	33,879	47,136	22,828	32,510	41,836	30,459	34,413	3,391,477	391,653	471,323	494,150	415,295	361,803	14,613	5,540,313
7. MANAGEMENT RESERVE																65,266
8. TOTAL																5,605,579

CLASSIFICATION (When Filled In)

INTEGRATED PROGRAM MANAGEMENT REPORT FORMAT 4 - STAFFING												PENDING UPDATE TO 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) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA												b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
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 SEP 2016 (4)	+2 OCT 2016 (5)	+3 NOV 2016 (6)	+4 DEC 2016 (7)	+5 JAN 2016 (8)	+6 FEB 2016 (9)	REMAIN FY17 (10)	FY18 (11)	FY19-LC (12)						
300 - Office of the President	14	645	10	6	6	6	6	6	6	6	42	63	0	790			
303 - Internal Audit	5	416	4	5	5	5	5	5	5	5	35	60	0	540			
304 - General Counsel	4	385	6	5	5	5	5	5	5	5	34	60	0	510			
31 - Communications	8	906	9	8	9	9	9	9	9	9	63	108	0	1131			
32 - Safety Health Security & Quality	55	6472	64	60	65	65	65	65	65	65	454	796	0	8107			
34 - Env Program & Strategic Plng	40	4288	39	44	48	48	48	48	48	48	330	602	0	5496			
35 - Business Services	57	6867	65	64	70	70	70	70	70	70	486	782	0	8545			
36 - Prime Contract & Proj Integr	52	4224	59	62	68	68	68	68	68	68	459	653	0	5731			
38 - Project Technical Services	32	5162	38	34	37	37	37	37	37	37	258	426	0	6068			
3B - PFP Closure Project	359	45040	366	358	364	372	341	342	342	342	1171	37	0	48391			
3C - Waste & Fuels Management Project	370	45456	338	269	291	295	298	293	293	293	2055	3750	705	53750			
3D - Soil & Groundwater Remediation	318	32379	262	293	278	271	265	265	265	265	1948	3448	797	40207			
3G - K Basin Oper & Plateau Remediation Proj	352	43055	332	282	296	300	294	288	288	288	2020	3112	366	50344			
g. TOTAL DIRECT	1667	195297	1592	1488	1544	1552	1511	1502	1502	1502	9356	13897	1869	229610			

CLASSIFICATION (When Filled In)

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) 2016/07/25		
b. LOCATION (Address and ZIP Code) Richland, WA 99354		b. NUMBER DE-AC06-08RL14788		b. PHASE Base		b. TO (YYYY/MM/DD) 2016/08/21			
		c. TYPE CPAF	d. SHARE RATIO		c. EVMS ACCEPTANCE 2009/09/18 NO YES X				
	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Current:	33,879	30,921	38,743	(2,958)	-8.7%	(7,822)	-25.3%	0.91	0.80
Cumulative:	4,701,467	4,642,200	4,486,364	(59,268)	-1.3%	155,836	3.4%	0.99	1.03
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	5,540,313	5,359,182	181,131	3.3%	1.03				
Explanation of Variance/Description of Problem:									
<p>Current Period Schedule Variance: The current month negative schedule variance is primarily due to Project Breakdown Structure (PBS) RL-0011 delay in progress on discrete demolition activities due to delays in readying the major PFP facilities (236-Z, 242-Z, 291-Z, and 234-5Z) for demolition. Also contributing to the variance is PBS RL-0012 BCWS being recognized for material procurement for Sludge Transport & Storage Container (STSC) vessels 13-24, which was completed ahead of schedule. The BCWS is just now catching up to the BCWP. Also, the relidding workscope completed five months ahead of schedule. The last of the performance was claimed during the period which was minimal as the BCWS comes into the current month window. Another contributor to the schedule variance was implementation of the alternate contracting strategy to start contractor on-site training, in-basin work package preparation, pre-mobilization, ingress / egress and installation of HIHTL shielding dog house work ahead of plan due to slip in receipt of In-Basin Equipment for installation. The contractor training at Maintenance & Storage Facility (MASF) and review of redline drawings following cold commissioning (a risk activity) is behind schedule due to late receipt of In-Basin Equipment for installation. Training at MASF is scheduled to start the beginning of August vs July as planned, but is still anticipated to complete on schedule in mid-August. The variance is partially offset due to PBS RL-0030 positive performance made on the ongoing 200-UP-1 monitoring well drilling campaigns, including recovery of drilling of FY2015 and FY2016 baselined campaigns to support Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) MS M-016-193, schedule recovery underway on the M-24 six 100-NR-2 monitoring well campaign planned in FY2015, and in August, scope to drill treatability test wells was re-planned from FY2015 to FY2017/FY2018 to reflect a delay in the start of work until FY2017.</p> <p>Current Period Cost Variance: The current month negative cost variance is due to PBS RL-0011 subcontracted labor support costs being higher than planned, consumable materials costing more than planned due to the extended time frame that it is taking to complete discrete field work and more Personal Protective Equipment (PPE) to support implementation of more conservative radiological controls are driving the increased costs for PFP to achieve slab on grade. Also contributing to the variance is PBS RL-0041 performing waste site remediation activities as authorized by Change Order 307, 100K Area Waste Site Quantity Increase. Actual costs were incurred for performing this scope with no offsetting earned value (-\$1,665K). A BCR is planned for September 2016 implementation that will add budget associated CO 307.</p> <p>Cumulative Schedule Variance: The variance is within reporting thresholds.</p> <p>Cumulative Cost Variance: The variance is within reporting thresholds.</p>									
Impact:									
<p>Current Period Schedule: The lifecycle EAC has been updated. The start of demolition on the critical facilities at PFP has been significantly delayed.</p> <p>Current Period Cost: No significant impact overall, the lifecycle EAC has been updated.</p> <p>Cumulative Schedule: N/A</p> <p>Cumulative Cost: N/A</p>									
Corrective Action:									
<p>Current Period Schedule: PBS RL-0011 safely accelerate decommissioning of 234-5Z, 236-Z, 242-Z, and 291-Z in order to allow demolition of facilities in the PFP complex to begin.</p> <p>Current Period Cost: EAC has been adjusted accordingly.</p> <p>Cumulative Schedule: N/A</p> <p>Cumulative Cost: N/A</p>									
Monthly Summary (to include technical causes of VARs, Impacts, and Corrective Action(s):									
<p>CHPRC continues to track completion of contract scope within budget and is currently projecting a Variance at Completion of \$181.1 million with \$65.3 million of Management Reserve (MR) for a total positive variance of \$246.4 million. For August, the project was 8.7 percent behind schedule and 25.3 percent under planned cost. Contract to Date (CTD), the project was 1.3 percent behind schedule and 3.4 percent under planned cost.</p> <p>There were four significant BCRs in the period that impacted the PMB; BCR-013-16-028R0 – <i>Definitization of CO #269, WESF K3 Ventilation and Stabilization</i>, BCR-011C-16-012R0 – <i>PRF Glovebox Removal Change in Approach (PFP C2) MR Draw</i>, BCR-041C-16-023R0 – <i>PBS RL-0041 Undistributed Budget Adjustments August 2016</i>, and BCR-PRC-16-050R0 – <i>Undistributed Budget Adjustments August 2016</i>.</p>									

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

Contractually Required Cost, Schedule, EAC variance, Management Reserve Use																	
Variance in Performance BAC and EAC: The variance at complete (VAC) between the BAC and EAC this month is a +\$181.1 million, +3.3% and is within reporting thresholds.																	
Format 1 and 3 Contract Data:	Contract Price Adjustments																
<table border="1"> <tr> <td>CPs - In Process</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Total Authorized Unpriced Work</td> <td>\$24,646</td> </tr> <tr> <td>Approved Adjustments to Contract Price (not reflected in B.4-1 Table)</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Total Negotiated Cost Changes</td> <td>-</td> </tr> <tr> <td colspan="2">Grand Total Adjustments</td> <td>\$24,646</td> </tr> </table>			CPs - In Process				Total Authorized Unpriced Work	\$24,646	Approved Adjustments to Contract Price (not reflected in B.4-1 Table)				Total Negotiated Cost Changes	-	Grand Total Adjustments		\$24,646
CPs - In Process																	
	Total Authorized Unpriced Work	\$24,646															
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)																	
	Total Negotiated Cost Changes	-															
Grand Total Adjustments		\$24,646															

Use of Undistributed Budget (UB), Management Reserve (MR), and Fee Activity,:			
Undistributed Budget Activity			
BCR Number	Title	Fiscal Year	UB
BCR-041C-16-023R0	<i>PBS RL-0041 Undistributed Budget Adjustments August 2016</i>	2015 - 2018	\$ 2,000K
BCR-PRC-16-050R0	<i>Undistributed Budget Adjustments August 2016</i>	2015 - 2018	\$ 4,200K

The Undistributed Budget increased by \$6,200K for an overall increase to the PMB of \$14,115K during August.

Management Reserve Activity			
BCR Number	Title	Fiscal Year	MR
BCR-011C-16-011R0	<i>Revision to Calendars for FY2017 and FY2018 - PFP CAP 2</i>	2015 - 2018	\$-2K
BCR-011C-16-012R0	<i>PRF Glovebox Removal Change in Approach (PFP C2) MR Draw</i>	2015 - 2018	\$-1,432K
BCR-012C-16-028R0	<i>Revision to Calendars for FY2017 and FY2018 - STP CAP</i>	2015 - 2018	\$-0.3K
BCR-030-16-040R0	<i>Definitization of CO #303 BC-5 AWLN</i>	2015 - 2018	\$6K
BCR-PRC-16-048R0	<i>Revision to Calendars for FY2017 and FY2018 - Operations</i>	2015 - 2018	\$-2K

Overall, there was a decrease in Management Reserve (MR) of \$1,430 during August.

Fee Activity			
BCR Number	Title	Fiscal Year	Fee
BCR-012-16-029R0	<i>Definitization of CO #301 100-KW Sand Filter Media Remediation</i>	2015 - 2018	\$8K
BCR-012-16-030R0	<i>Definitization of CO 300 - 100KW Garnet Filter Remediation</i>	2015 - 2018	\$50K
BCR-013-16-028R0	<i>Definitization of CO #269, WESF K3 Ventilation and Stabilization</i>	2015 - 2018	\$575K
BCR-030-16-040R0	<i>Definitization of CO #303 BC-5 AWLN</i>	2015 - 2018	\$6K

Overall, there was an increase in Fee of \$639K during August.

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

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:
9/16/2016

Approved by:

Date:

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

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

D. A. Millikin
Director of
Communications

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

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

PROGRAM SUMMARY

Project Services and Support functional activities continue to provide support and technical services to all CHPRC projects as well as central management of cross-cutting services.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
16-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 82 percent by compressing occupancy and vacating underutilized facilities. Vacated/unoccupied facilities declared unusable and designated inactive placed in Care Taker System.	9/30/16	75%
16-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 web site.	10/9/16*	75%
16-EMS-ADMIN-OB3-T1	Energy and natural resource conservation.	Establish electronic signature system for contracts using Adobe Acrobat.	9/30/16	100%
16-EMS-PTS-OB1-T1	Reduce the potential generation and release of toxic, hazardous, and non-regulated chemical materials to the environment, evaluate for compliance with universal waste and other recycling requirements, and identify opportunities for waste reduction.	Monitor and evaluate spill prevention program and existing techniques to reduce and/or eliminate spills to the environment by surveillances, on-going training.	9/30/16	90%
16-EMS-PTS-OB2-T1	Increase chemical management oversight of subcontractors and PTS operations.	Increase chemical management oversight of subcontracts, evaluate chemical procurement methods, identify expired chemicals, track, and properly dispose of expired chemicals. Perform quarterly assessment on chemical inventory locations.	9/30/16	80%

*This O&T cannot be closed out completely until after FY2016 ends. Progress will be at least 60 percent by August 31, 2016.

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	1	5	<ul style="list-style-type: none"> 8/29/2016 - Worker tripped over co-worker's feet and fell to floor, scraping left arm. (24102)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- There was one first aid injury during the month of August in the functional groups.
 - Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
 - Beryllium assessments have been completed on 1,422 CHPRC facilities. Beryllium characterizations have been completed on 1,322 CHPRC facilities.
 - Provided support for Hoisting and Rigging proposed changes to the Site Wide manual.
 - Provided technical support to KBO&PR on excavation issues.
 - Implemented Respiratory Protection Electronic Tracking program for RCCC transitioned projects.
 - Developed visual media, "Mine Safety Appliance TL" posters of cartridges to all issuance stations.
 - Radiological Control accomplishments:
 - Updated Survey Simple, with V5.3 update.
 - Revised company survey process for outdoor areas (transferability).
 - Prepared due diligence radiological survey plan for 618-10 and initiated surveys.
 - Supported RCCC transition activities including new hire orientation and preparation and distribution of dosimetry to sub-contractors.
 - RCCC RadCon software suite transition completed.
 - Conducted second quarter company ALARA meeting.
 - Nuclear Operations Support & Compliance accomplishments:
 - Safety Basis documents and letters transmitted to RL include:
 - Letter, CHPRC-1601961, dated August 2, 2016, *Transmittal of the 2016 Annual Update to the Plutonium Uranium Extraction Facility Documented Safety Analysis, CP-14977, Revision 9, The Unreviewed Safety Question Determination Summary, and the Fire Hazards Analysis for Plutonium-Uranium Extraction Facility, CP-41822, Revision 1.*
 - Letters received from RL:
 - Letter, 16-NSD-0065_RL, dated August 12, 2016, *Approval of PRC-PRO-NS-062, Revision 3, "Unreviewed Safety Question Process, and PRC-PRO-NS-53097, Revision 0, "Determining Applicability of the USQ Process".*

- Letter, 16-NSD-0069_RL, dated August 12, 2016, *Approval of Submittal of the PFP Documented Safety Analysis, Revision 14, and the PFP Technical Safety Requirements, Revision 14.*
- Letter, 16-NSD-0067_RL, dated August 17, 2016, *Approval of Annual Update to the Tank 241-Z-361 Documented Safety Analysis, HNF-20503, Revision 2 and the Tank 241-Z-361 Technical Safety Requirements, HNF-20504, Revision 3.*
- Letter, 16-NSD-0058_RL, dated August 26, 2016, *Approval of the 2016 Annual Update to CP-18179, Revision 8, "224-B Facility Documented Safety Analysis," and the Unreviewed Safety Question Determination (USQD) Summary.*
- Other:
 - Completion of CHPRC-02995, *Generic Internal Load Securement Plan for the 20 ft. x 10 ft. x 9 ft. (1800-TL) Containers Secured Inside the IP-1 Top Hat Container*
 - Authorization to Ship North Load-out Pit (NLOP) Equipment under CHPRC-TS-16-004, *Contaminated Equipment Special Packaging Authorization Shipment Evaluation Checklist for the NLOP Equipment Shipment from T-Plant to ERDF– CE SPA SWOC 2016-001, Revision 0 (CE-1 Payload).*
 - Release of HNF-4013, *WESF Emergency Planning Hazards Assessment, Revision 7.*
 - Release of HNF-SD-PRP-HA-002, *PFP Emergency Planning Hazards Assessment, Revision 12.*
 - Release of CHPRC-02766, 216-Z-9 and 241-Z-361 Emergency Planning Hazards Assessment.
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
 - 267 Condition Reports (CRs) were screened:
 - One significant issue identified.
 - Three adverse issues identified.
 - 123 Track until Fixed (TUF) issues identified.
 - 44 Trend Only (TO) items identified.
 - 91 Opportunity for Improvement (OFI) items identified.
 - Five Screened Out.
 - 221 CRs administratively closed.
 - 332 CRs actions administratively closed.
 - Provided support and coordination for the Bi-Monthly conference call with the Defense Nuclear Facilities Safety Board (DNFSB) to discuss the PFP demolition planning and readiness assessment status as well as the Bi-Monthly DNFSB Site Representative Meeting.
 - Nine documents were provided in response to DNFSB requests for information.
 - Published the July 2016 Contractor Assurance System Summary Report.
 - One external Lessons Learned was submitted to OPEXShare in August 2016: 2016-RL-HNF-0014, *Apply Conservative Controls for Entry into Potentially Contaminated Areas* (external).
 - One event was reported into the Noncompliance Tracking System: NTS-RL--CPRC-PRCGEN-2016-0002, *Subcontractor Worker Contacted by HDPE Piping.*
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
 - Conducted Nuclear Safety and Performance Evaluation Board (NSPEB) Review of Corrective Actions Taken for SHSQ-2014-NSPEB-13323 (STP/D&RS and CPSM), field work complete.
 - Facilitated Doing Work Safely Workshop for S&GRP.
 - Supported DOE QA surveillance of CHPRC QA qualification processes.
 - Supported PFP Readiness Assessment preparations.

- Developed plan and initiated in-field activities for the *Administrative Control Level for Extremities Exceeded Effectiveness Review* at PFP.
- Environmental Management Corporate Quality Assurance Metrics Management Assessment in progress; evaluating the effectiveness of the CHPRC Quality Assurance Program (QAP) and verifying Key Attributes described in HNF-22632 for Quality Assurance are being met.
- Completed Integrated Evaluation Plan.
- Completed annual PFP Suspect Counterfeit Surveillance.
- o Fire Protection accomplishments:
 - The development of a Fire Alarm Replacement Project began development in July and continued into August.
 - Subcontract task was established by the 300-296 Project for Jensen Hughes to update the Fire Hazard Analysis (FHA).
 - Fire Protection has been working with the Hanford Fire Marshal's Office to resolve comments on the WESF FHA.
 - A water supply analysis has been completed in support of MSA's need to know the amount of water that has to be stored in the 200 East/West areas for firefighting purposes.
 - An analysis was completed in response to a request to store DOT Type 7A 1800TL containers at CWC.
 - Walk downs of the CWC/WRAP storage buildings are being performed to identify discrepancies with the fire suppression systems. This will close on CRRS associated with concerns about compliance with seismic requirements and design issues.
 - Deactivation analyses were completed for PFP in preparation for the demolition of the Plutonium Reclamation Facility.
 - Fire Protection has been supporting KBO&PR on the REDOX Roof design.
 - A Fire Marshal Permit was issued to access REDOX to support the Pu Bag Project. Work Packages were also reviewed and approved.
 - The following assessment activities were completed:
 - SWOC:
 - o W1-15-07690/P, WRAP Ignitable/Reactive Waste Inspections
- Facility Fire Protection Assessments:**
 - Multiple Facility Fire Protection Assessments (FFPA) were started in June. The activities are being conducted by Associate Fire Protection Engineers and mentored by Qualified Fire Protection Engineers (FPE). The final reports will be completed by the end of September 2016.
 - FHA status:
 - o 105KW Complex FHA is under review by the Hanford Fire Marshal.
 - o PUREX FHA is under review by the Hanford Fire Marshal.
 - o WESF FHA is under review by the Hanford Fire Marshal.
 - o U-Plant FHA is being developed.
 - o Building 402 FHA is being developed.
- Status of SHS&Q Focus Areas:
 - o **Issue:** Beryllium (Be) program assessment findings from DOE-HQ, Office of Safety, Health and Security Independent Oversight Inspection report.
 - o **Status:** Comment resolution is complete for Revision 3 and is being routed for signatures.
 - o **Action:** Beryllium (Be) facility assessments and characterization on schedule. Beryllium facility assessments have been completed on 1422 CHPRC facilities.

- o **Issue:** Accident & Injury Reduction.
- o **Status:** Continue investigating recordable, DART, and first aid injuries to determine cause, prevention, reduction, to prevent recurrence.
- o **Action:** Continue interface with project personnel, supporting EZAC and project safety meetings for continued focus on injury prevention.
- o **Issue:** PFP Support.
- o **Status:** Supporting PFP with dedicated OS&IH personnel and RadCon personnel, from the SHS&Q Central group for oversight of high risk work activities.
- o **Action:** Supporting PFP demolition readiness preparations and responses to Readiness Assessment Team observation.
- o **Issue:** Fire Protection program concerns.
- o **Status:** Program continues to improve. New MSA Hanford Fire Department (HFD) Marshal (Adam Moldovan) has improved the working relationship with CHPRC Fire Protection personnel and is addressing long standing issues.
- o **Action:** Continued interface with MSA regarding CHPRC fire system maintenance back log items.

Environmental Program and Strategic Planning (EP&SP)

Environmental Protection

- **Compliance Status**

- o On August 16, received an Ecology Resource Conservation and Recovery Act of 1976 (RCRA) Notice of Penalty and associated Administrative Order for alleged violations of waste designation and record keeping requirements at T Plant. Fact gathering and regulatory evaluation were immediately begun. Consideration is being given to filing a formal appeal.
- o There were three regulatory agency compliance inspections of CHPRC managed areas and facilities: Hanford Facility RCRA Permit annual inspection of the Columbia River shoreline, Air Operating Permit inspections of CHPRC internal combustion engines (e.g. generators) and the 2706-T facility.
- o Canister Storage Building (CSB) stack traverse velocity measurements were completed by project personnel. This is one of the last steps to confirming that past CSB stack sampling did result in acceptable emissions measurements, in spite of the fact that the sampling occurred at stack flow rates below the originally documented “qualified” flow range. This is one of the last steps in resolving the compliance issue with Ecology and Health.
- o Continued to support WESF in addressing compliance challenges in implementing temporary air abatement measurements during the ventilation upgrades project and initial activities for closing the WESF hot cells.
- o Continued meetings with RL and Ecology on issues pertaining to renewal of the Hanford Facility RCRA Permit. Current issues under discussion and review are Part A, groundwater monitoring, contingency planning and closure standards.
- o Completed CHPRC actions, including certification of revised RCRA Part A applications, for transferring four N Area TSD units from Washington Closure Hanford (WCH) to CHPRC.

Environmental Compliance & Quality Assurance (ECQA)

- **Assessment Program**

- o An external assessment of CHPRC compliance with Air Operating Permit requirements was completed on August 11, 2016. The assessment team was comprised of a Senior Air Quality Specialist and a Senior Regulatory Specialist from CH2M Corporate offices in Phoenix, NV, and Oakland, CA, respectively. The assessment team identified one findings and one observation.

- o A Worksite Assessment to verify that asbestos containing materials at four former 100K facilities was being properly managed was completed on August 3, 2016. The assessment team, consisting of two ECQA personnel, identified no issues.

Business Services

- **Acquisition Planning:**

- o Performed an OCI evaluation/determination on engineering work in support of the 300-296 Remediation Project.
- o Evaluated CLTR for use on building trades support contract.
- o Facilitated the acquisition of a personal man-lift for the 100K West Annex Facility. Equipment was being rented and would need to continue for the foreseeable future. Assisted in the development of the special equipment request and SOW development that authorized the purchase of the equipment.
- o Coordinated the development of a Rough Order Magnitude Cost and completed a Plant Forces Work Review (PFWR) for the federal building modifications that may be authorized to be performed for CHPRC relocation to that facility.
- o Met with contractor representatives to discuss methods for obtaining and identifying deliverables for waste remediation site designs.
- o Met with representatives at ERDF to discuss transition progress, subcontract administration processes, and project-related planning activities for FY2017.
- o Developed the Expression of Interest/Sources Sought document, pricing estimate template, and draft statement of work for 100K Area Waste Site Remediation. Also drafted the competitive RFP schedule.
- o Drafted SOW for acquiring/transitioning of the Building Trades Safety Representative that is primarily assigned to the RCCC transitioning work scope.
- o Developed and reviewed a revised field estimate as it applies to the 100K construction effort. Developed a competitive procurement strategy for performing additional construction work beyond the currently planned baseline project activities.
- o Developed the SOW and the over-arching procurement strategy for 100K Waste Site Remediation Support Services and the associated procurement strategy that included the ability to establish fixed price contract tasks to perform this work.

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

- o FY2016 Physical Property Inventory review continues with field work target completion date of September 30, 2016. Final inventory review reports and Balanced Score Card will be submitted by October 31, 2016. F&PM has completed locating 83.69 percent of 3,317 items through August 2016.
- o 2420 Stevens move planning continues. Floor layouts and move forms complete. Initial draft integrated schedule developed. Major move activity expected to start in late October.
- o Efforts to remove and replace MO029 at WESF have restarted. Target completion date of February 28, 2017.

- **Finance:**

- o August month end completed with no suspensions.
- o Continued supporting documentation requests for the FY2015 Incurred Cost Report audit.
- o Continuing discussions regarding audit of Disclosure Statement #9 with Cohn Reznick.
- o Completed Department of Revenue audit of FY2012-2015. The Department of Revenue will issue CHPRC a tax refund of \$808,544 plus interest. The refund is related to subcontracts with labor cost that is not subject to use tax.
- o Supported Time and Attendance Internal Audit. Findings are continuing to be worked and will require follow-up with employees and managers to document upgrades and safety expo attendance. Final conclusion: "Based on the results of the audit tests performed, Internal Audit

- concluded that practices were well controlled and substantially compliant with CHPRC policies and procedures, contractual terms, regulatory requirements, and sound business practices.”
- o Submitted annual Management Representation Letter to RL.
 - o Preparations for fiscal year-end close are underway.
 - **Human Resources:**
 - o Human Resources (HR) attended a local training at Work Source Columbia Basin (Work Source) to continue to stay current on job posting requirements. CHPRC continues our relationship with Work Source, enhancing our ability to reach a wider and more diverse set of applicants through their new and improved online posting system.
 - o Discussions and planning are underway with WCH to ensure a smooth transition of employees that are on short term disability or plant injury absence. These employees will transition to CHPRC at the end of WCH’s contract September 30, 2016. This move requires close coordination of data and information sharing.
 - o Completed Work Site Assessment Report on Appendix F Facility Stipend Pay section of PRC-PRO-HR-046, “Compensating Exempt and Salaried Nonexempt Employees.”
 - **Labor Relations:**
 - o Arbitration originally scheduled for December 15-16, 2015, to address HAMTC’s General Council grievance in regards to D&D activities at PFP has been postponed. Parties continuing to discuss and exchange settlement proposals with the intent to try and resolve issue without proceeding to arbitration.
 - o Grievances PRC-015-051 and PRC-016-014 continues dealing with purchasing items (i.e. pipe spools) from offsite vendors have been requested to proceed to arbitration, although the union put a hold on selecting the panel until they can further review.
 - o Preparing for arbitration scheduled October 11, 2016. Union is claiming miss-assignment of work in regards to respirator maintenance.
 - **Procurement:**
 - o Awarded/amended 197 contracts with a total value of \$21.3 million. Additionally, awarded 206 new material Purchase Orders (PO) valued at \$1.37 million to support ongoing project objectives.
 - o At the end of the first 95 months of the CHPRC project, procurement volume has been significant; \$2.4 billion in contract activity has been recorded with approximately 53.61 percent, or \$1.28 billion, in awards to small businesses. This includes 7,427 contract releases, 21,218 POs, and 252,988 P-Card transactions.
 - o Contract 55747, Release 10 was awarded to Apollo Sheet Metal Inc., on August 17, 2016. This is a firm fixed price contract for “Annex ECRTS Equipment Install.” This award is valued at \$2,683,84.44.
 - o Contract 60649 was awarded to Pro-Cut on August 17, 2016. This is a firm fixed price contract for “PFP Area Preparation for Demolition Removal of Wall Sections.” This award is valued at \$84,439.13.

Prime Contract and Project Integration (PC&PI)

- **River Corridor Closure Contract (RCCC) Transition:**
 - o Continued to support the transition of the balance of RCCC scope to CHPRC, projected for August 29, 2016.
- **Prime Contract Compliance (PCC):**
 - o In August, PCC received and processed six contract modifications (524, 526-530) from RL.
 - o The Correspondence Review Team received and determined the distribution for 78 incoming letters/documents. The PCC Manager reviewed 42 outgoing correspondence packages.
 - o Issued two Notice of Change Letters: CHPRC-1603425, *Notification of Change for Additional Characterization Required in Final Approved Remedial Investigation/Feasibility Study Work Plan for 200-WA-1*; CHPRC-1603429, *Notification of Change for Additional Characterization*

Required in Final Approved Remedial Investigation/Feasibility Study Work Plan for 200-SW-2 Operable Unit.

Integrated Services

- **Estimating & Program Support**

- o One CP/REA was submitted to RL on August 18, 2016:
 - CP 041 305 1616 - 300-296 Waste Site Design Change & Initiate Procurement, Testing, and Debris Removal
- o 26 CPs/REAs have been submitted on or ahead of schedule FY2016 to-date with zero CPs/REAs submitted late. Initiated development of three CPs/REAs:
 - CP 040 309 1623 - Data Quality Objectives for Assessing the Structural Integrity for the PUREX Tunnels one and two.
 - CP 013 310 1624 - Solid Waste Operations Complex Hazards Mitigation Activities.
 - CO 040 311 1625 - Emergency Response for Facility/Waste Site ESH&Q or Remediation.
- o Continued development of two CPs/REAs:
 - CP 013 PRC 1620 - WESF Storage Basin Analysis and Quarterly Report.
 - CP 041 307 1621 - 100-K Additional Tons FY2016 and FY2017.
- o Supported development of RCCC life-cycle PMB and associated BCRs.
- o Miscellaneous Estimating Support:
 - Supported RL's request for additional information on Change Orders:
 - CP 041 289 1563 - Initiation of Transition Planning for the RCCC Work Scope.
 - CP 030 294 1570 - 100-KR-4 RI FS Decisional Rewrite.
 - CP 030 299 1578 - 200 West P&T System Membrane Bioreactor Cassette Additions.
 - CP 040 306 1593 - Initiate Transition of River Corridor Contract (RCC) Scope Activities into the Plateau Remediation Contract (PRC) - 324 Complex
 - CP 040 306 1593 - Initiate Transition of RCC Scope Activities into the Plateau Remediation Contract (PRC) - 324 Complex.
 - CP 040 306 1613 -Minor Capital Funded Projects RCCC Transition Add-Ons.
 - CP 040 306 1615 - Surveillance & Maintenance Sites RCCC Transition Add-Ons.
 - CP 040 306 1616 - 300-296 Waste Site Design Change, Initiate Procurements, Initiate Testing, and Initiate Removal of Debris.
 - Supported development of the RL-0041 input to the FY2017 PMB ETC updates/long-range planning for submittal to RL.

- **Interface Management:**

- o Interfaces (Technical, Administrative and Regulatory):
 - Facilitating request to expedite approval of Waste Treatment Plant/Washington River Protection Solutions (WRPS) Direct Feed Low Activity Waste (DFLAW) transfer line excavation permitting. Proposed lines would traverse CHPRC owned waste sites. Issue with waste transfer lines crossing an un-remediated waste site was reviewed by the Contractor Interface Board, with follow on meetings to develop options established.
 - Supporting and facilitating communications between WRPS at 222-S and CHPRC at REDOX. Attending WRPS 222-S Plan of the Week (POW) to enhance the flow of communication between WRPS and CHPRC. USQ reviews of adjacent contractor work packages are ongoing.
 - Facilitated data collection and provided comments to MSA for annual Snow Removal Plan.
- o Annual Forecast of Services:
 - Analyzing/verifying MSA usage based service forecast data between the in process FY2017 PMB/ETC submittal and the preliminary FY2017 MSA usage based forecast data provided to MSA in June. Final FY2017 MSA usage based forecast data due to MSA mid-September.

- o Controlling and Service Agreements:
 - Published Interface Control Document, PRC-ICD-OHC-00001, with WRPS regarding the future use of the existing ERDF Leachate Transfer Line and additional tie-in interfaces related to the new Leachate Transfer Line to the 200W P&T.
 - Preparation of a preliminary draft Administrative Interface Agreement (AIA) is underway in response to the apparent need for an interface agreement between WRPS and CHPRC regarding timely response and notification of environmental events for Liquid Effluent Processing and Disposal Facilities. Initial communication of a recent groundwater exceedance at Liquid Effluent Retention Facility (LERF) was not made to the CHPRC Environmental Event Single Point of Contact (SPOC), which resulted in the untimely notification of the appropriate WRPS personnel.
 - Published Memorandum of Agreement MOA-WRPS-CHPRC-2009, Revision 6, for the performance and payment of services between WRPS and CHPRC.
 - Memorandum of Agreement for the performance and payment of services between Battelle Memorial Institute, Operator of Pacific Northwest National Laboratory and CHPRC currently routing for approvals.
 - Comments submitted to WRPS for TOC-ICD-PRC-00034, Interface Control Document between WRPS and CHPRC for Lock and Tag Authority for specific Breakers at Canister Storage Building.
 - Drafting new AIA (PRC-AIA-OHCs-04011, Revision 0) between CHPRC, MSA, and WRPS for Incurred Cost Audits of Shared Subcontractors.
 - Drafting new MOA with WCH at the request of the WCH RCCC close out team.
 - Finalized Interface Control Document (ICD) with MSA for Electrical utilities; it is routing for signature.
- o J.3 Table Maintenance:
 - Obtained internal CHPRC concurrence of the J.3 table updates associated with RCCC transition and other miscellaneous changes. MSA will provide the final J.3 update to RL in September 2016 to close out RCCC post transition action for Interface Management.
- o J.13 and J.14 Tables – Quarterly Update:
 - Provided concurrence to MSA on the latest review and update of the J.13 and J.14 tables. New assignments related to the RCCC transition to PRC will be captured in the next J.13/J.14 table review.
- o Internal Operations:
 - Continue working toward completion of the remaining 12 CRRS actions resulting from the Interface Management work site assessment of SOWs for services provided to CHPRC by MSA. These actions involve corrections/changes to specific Project SOWs to align with Procurement templates, J.3 usage-based service definitions, and other pertinent interface agreements. To assist facility BTRs/POCs in this effort, SOWs were redlined with recommended changes and sent out with a communique from IFM.
 - Working several documents revisions/cancellations related to the RCCC scope transfer to PRC. Involved parties include City of Richland, PNNL, and MSA.
- **Information Management:**
 - o Processed 24,448 Electronic Records into the Integrated Document Management System (IDMS).
 - o Continued support to W&FMP for documentation of requirements for Field Automated Checklist Tracking System (FACTS).

Project Integration

- **Overall:**
 - o During August, Project Integration facilitated and supported the processing of 23 BCRs.

- o Continued to support the DOE PM-30/EFCOG initiative to update the DOE Earned Value Management System Interpretation Handbook (EVMSIH) by participating in the DOE-HQ Office of Project Management Oversight & Assessments (PM-30), sponsored team performing an Earned Value Management System (EVMS) recertification review of the Uranium Processing Facility (UPF) Project at Oakridge, Tennessee.
- o Supported the CHPRC Planning Review Board (PRB) for RCCC transition capital asset scope. Significant effort was expended reviewing the DOE-HQ ICE report for factual accuracy and providing documents to support the DOE-HQ External Independent Review (EIR) of PBS RL-0041 Capital Asset Project scope planned for the week of September 12, 2016.
- o Supported the DOE-HQ Independent Cost Estimate (ICE on-site review of RCCC transition Capital Asset Project scope) held August 1 through August 5.
- o Incorporated RL comments into the FY2017 PMB Update/Long Range Plan in anticipation of the final submittal to RL on September 12, 2016 for their approval.

Program Integration

- **000 Project EVM Support:**

- o Prepared and submitted BCR-000-16-004R0 – CO #304, Support Initiation of Transition of RCC Scope Activities to PRC and BCR-000-16-005R0 – CO #304, Indirect Support to Execution of River Corridor Contract Scope. These Baseline Change Requests incorporate the indirect transition activities and the effects to the indirect accounts of actual RCCC transition.
- o Updated FY2017 Estimate To Complete (ETC) submittal for 000 indirect account adjustments related to updated full time equivalent positions in indirect organizations, as well as updates to include continuation of Productivity Tracking in PFP's account
- o Developed updated FY2017 and FY2018 General & Administrative Rates for incorporation into FY2017 Budget Update Submittal – will ensure estimate to complete fully liquidates indirect estimate.

- **Risk Management and Reporting:**

- o Submitted formal transmittal letter to RL (CHPRC-1603852) for risks outside CHPRC's ability to manage related to contamination spread, and existing field conditions.
- o Submitted formal transmittal letter to RL (CHPRC-1602146R1) for risks related to additional shipments that are currently outside the PRC period of performance.
- o Completed revisions to the RCCC Course of Action (COA) risk analysis for the EIR team.
- o Completed review of the DOE-HQ ICE report for factual accuracy and proved documents to support the DOE-HQ EIR of PBS RL-0041 Capital Asset Project scope.
- o Conducted meetings with PFP and STP Project Control Directors related to the Integrated Project Team review of PFP and STP Field Execution Schedule Practices. Factual accuracy check is scheduled to complete September 22, 2016.
- o Conducted project specific risk evaluations to support FY2017 risk analysis.
- o Issued the CHPRC July Monthly Performance Report to RL.
- o Issued the CHPRC July Monthly Highlights to the Nuclear Business Group.
- o Performed risk register reviews for the CHPRC Projects. In addition, supported the projects with 23 BCRs that were processed in the month of August.

- **Strategic Management:**

- o Progress continues to be made towards completion of the Productivity Corrective Actions. Completed 23 of 24 actions (status at 96 percent).
- o Continued updating information for the Long Range Planning deliverable due on September 12, 2016 as part of the FY2017 PMB/ETC update. Included addition of Long-range Plan (LRP) scope elements and associated backup documentation to support funding for FY2017.

- o Worked with projects to begin strategic planning to support revision of the Integrated Priority List.
- o Held monthly Productivity Tracking Log meeting with the projects. Discussed company level metrics and Projects briefed their metrics of productivity delays and efficiencies.
- o Finalized Productivity Tracking requirements to incorporate FES driven issues – items will be loaded directly into Productivity Tracking Log tool and subsequently updated for proper categorization. Held workshops with projects to manage data consistency issues, with draft updated causal codes developed to ensure consistency.
- o Productivity Tracking process was presented to the RL Federal Project Directors (FPD); FPDs acknowledged importance of tool and ability to mitigate issues
- o Participated in the CAP-0041 Project Review Board and identified path forward.
- o Supported Remedy Selection and Implementation organization by providing feedback on the content, organization and benefits (usage) of the 2015 Aerial Survey data. This discussion was held to storyboard the survey information into a Field Summary Report.
- o Provided historical photos, drawings, and technical documents associated with the 216-Z-1 Crib to support response to soil subsidence event.
- o Worked with RL to provide information on the site wide plutonium waste inventory.

Project Technical Services (PTS)

- **Engineering Services**

- o Developed Condition Reports and Corrective Actions for Findings and Recommendations from a recent corporate assessment of NU-MASS-0092, Application and Use of Engineering Procedures across CHPRC Projects.
- o Revised and published the revision to PRC-PRO-EN-8016 covering the new HOLD Point process.
- o Provided W-130 HVAC duct assemblies NCRs and Acceptance Testing support.
- o Provided support for REDOX Roof design review.
- o Provided support for Project 300-296 PRB Technical Evaluation.
- o Performed chemical compatibility evaluation to remove Drip Bags from REDOX North Sample Gallery.
- o Performed review of calculations for PFP MT and Column Glove Box removal through PRF roof.
- o Provided support for ECRTS Configuration Management Work Site Assessment.
- o Continued site wide programs electrical safety support.
- o Working with PFP, WESF, and T Plant DAs (324 Bldg. will also be included) and Contracts to develop a master contract for elevator maintenance/repair statement of work.
- o Continuing to support STP in reviewing ECRTS equipment submittals.
- o Assisting S&GW on the proper method of purchasing ASME B31.3 pipe spools.

- **Procedures and Training**

- o Continued RCCC transition support of Training and Procedures.
- o Participated in Soil and Groundwater procedure validation/walk downs.
- o Conducted a PPS training course for new hired Operations Specialists.
- o Training group supported establishment of 100K Performance Demonstration expectations.
- o PFP RSA (CR-3 TN-1) has been approved and submitted to PFP Operations management.
- o Supported HR audits for Administrative Specialist positions.
- o On-boarded Project Manager for transition of RCCC procedures.

- **Operations Program**

- o ConOps/Work Control/Conduct of Work

- Published maintenance procedure revision/conversions for calibration procedures for PFP Demolition Air Samplers
- Performing data collection in support of upcoming DOE HQ assessment of Maintenance
- Supported corporate assessment of GWF Sampling Program
- Added Pre-Demolition checklist to D4 procedures (CR-2014-2176)
- Updated Work Management and Maintenance Control web site
- Commenced integrating tasks/hazard into a PRC General Hazards Analysis and reviewed differences across the site (PRC/MSA/TOC).
- Supported critiques for hazardous energy control issues (PFP-HVAC unit, CPS&M Insulator), Freon, and Live wire events.
- Participated in root cause for CPS&M insulator event.
- Submitted QNSR for RL review and approval.
- Researching proposed changes to JCS to support Fire Systems Maintenance reporting and potential impacts to projects.
- Performed oversight of 100K Electrical Maintenance activities.
- Conduct of Work Mentor assigned to focus duties on the demolition and related activities of 2710-S, 2711-S and 2718-S.
- Supported asbestos gasket removal activities at T-Plant on August 10.
- Published revised Training Program Description to include PM/S Coordinators and updated Planner Qual Card.
- Performed Doing Work Safely Workshops
- Completed setting up SharePoint Library for Craft Specific Hazards Analysis (CHA) and General Industrial Hazards Analysis (GHA).
- Supported Apparent Cause Evaluation for Insulator pulling wire covers off at 2710-S.
- o **Emergency Preparedness (EP)**
 - Developing FY2017 Annual Drill Plan and supporting site exercise plan development
 - Reviewing CSB Continuity of Operations (COOP) drill, MSA replacement plan and end of year CRAR rep.

Communications

- o Communications supported RL in the development of news articles that ran in local media and in the Weapons Complex Monitor:
 - An article was published in the Tri-City Herald. The article discussed the transition of the RCCC scope to CHPRC. This story also appeared in the Weapons Complex Monitor.
- o Communications supported RL in the development of social media posts featuring the installation of the new ventilation system at the WESF and the demolition of a small former PFP support building.
- o Communications developed public involvement materials for the HAB River and Plateau Committee Meeting focused on the PFP Milestone change, the 100 D/H Proposed Plan, the 324 Building Closure Plan and other important topics. Communications also coordinated Public meetings regarding the Proposed Closure Plan for PUREX North Closure Plan and the Proposed Closure Plan for the 324 Building.
- o Communications assisted RL in hosting the Office of Management and Budget, Congressional staffers, EM Site Cleanup Dialogue, and eight public tours.

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	2.2	2.2	0.5	(0.0)	-0.3%	1.6	75.2%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	0.0	0.5%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	37.9%
Communications	0.1	0.1	0.1	0.0	0.0%	(0.0)	-11.2%
Safety, Health, Security and Quality	1.4	1.4	0.9	(0.0)	-0.1%	0.4	30.8%
Environmental Program and Strategic Planning	0.4	0.4	0.3	0.0	0.0%	0.1	17.0%
Business Services	2.1	2.1	1.7	0.0	0.0%	0.4	20.7%
Prime Contract and Project Integration	2.0	2.0	1.4	0.0	0.0%	0.6	28.2%
Project Technical Services	0.7	0.7	0.5	(0.0)	-0.2%	0.2	24.5%
Indirect WBS 000 Total	9.1	9.0	5.7	(0.0)	-0.1%	3.3	36.8%

Numbers are rounded to the nearest \$0.1 million.

Indirect WBS 000

CM Schedule Performance: (-\$0.0M/-0.1%)

The variance is within reporting thresholds.

CM Cost Performance: (+\$3.3M/+36.8%)

The favorable cost variance is primarily due to continuing performance of work to implement RCCC Transition, prior to incorporating the scope into the PMB.

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	5.0	5.0	4.9	(0.0)	-0.0%	0.1	2.7%	5.7
Internal Audit	1.0	1.0	1.0	0.0	0.0%	0.0	1.2%	1.1
General Counsel	1.3	1.3	1.6	0.0	0.0%	(0.3)	-24.7%	1.5
Communications	0.9	0.9	1.0	0.0	0.0%	(0.1)	-9.1%	1.0
Safety, Health, Security and Quality	13.3	13.3	11.1	(0.0)	-0.1%	2.2	16.9%	15.0
Environmental Program and Strategic Planning	4.5	4.5	3.9	0.0	0.0%	0.6	12.4%	5.0
Business Services	18.8	18.8	16.4	0.0	0.0%	2.4	12.6%	21.3
Prime Contract and Project Integration	18.6	18.6	16.7	0.0	0.0%	2.0	10.5%	21.1
Project Technical Services	6.3	6.3	5.8	0.0	0.1%	0.5	8.2%	7.1
Indirect WBS 000 Total	69.8	69.8	62.4	(0.0)	-0.0%	7.4	10.6%	78.8

Numbers are rounded to the nearest \$0.1 million.

Indirect WBS 000

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

The variance is within reporting thresholds.

FYTD Cost Performance: (+\$7.4M/+10.6%)

The favorable cost variance is primarily due to the accelerated completion of the final RCCC Transition Plan to RL in February 2016. Partially offset due to a significant number of labor hours that have been charged to WBS elements outside the Legal Department.

RISK MANAGEMENT STATUS

<p>Unassigned Risk</p> <p>Risk Passed</p> <p>New Risk</p> <p>Change</p>	<p>● Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.</p> <p>● 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.</p> <p>● Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.</p>	<p>↑ Increased Confidence</p> <p>↔ No Change</p> <p>↓ Decreased Confidence</p>
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																	
		Month	Trend																		
Executive Level Risks																					
Explanation of major changes to the project monthly spotlight chart:																					
No major changes to the risk profile for the month of August .																					
Realized Risks (Risks that are currently impacting project cost/schedule)																					
PRC-022: Higher Than Anticipated Attrition	Higher than planned attrition or staffing reduction is experienced resulting in project schedule delays, and increased training costs. Risk Handling Strategy: Avoid Probability: Likely (75% to 90%) Worst Case Impacts: \$5 million, 40 days	●	↑	Risk Event: CHPRC continues to experience higher than anticipated attrition for FY2016. <table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <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>Develop/implement CHPRC People Legacy Program.</td> <td rowspan="4" style="text-align: center;">FY2015</td> <td style="text-align: center;">On Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Target recruiting for key project resources</td> <td style="text-align: center;">On Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Continue PFP resource transition plan</td> <td style="text-align: center;">On Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>River Corridor Closure recruitment</td> <td style="text-align: center;">On Going</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Recovery Action Assessment: Forecasted completion dates for recovery actions were updated to reflect continued planned efforts to recover this risk throughout the PRC. CHPRC continues to increase recruitment, and analysis of comparable markets for salary competitiveness. Potential problems exist pending funding profiles for other site contractors. No alternative course of actions needed at this time.	Risk recovery action(s)	Risk Date	FC Date	%	Develop/implement CHPRC People Legacy Program.	FY2015	On Going	N/A	Target recruiting for key project resources	On Going	N/A	Continue PFP resource transition plan	On Going	N/A	River Corridor Closure recruitment	On Going	N/A
Risk recovery action(s)	Risk Date	FC Date	%																		
Develop/implement CHPRC People Legacy Program.	FY2015	On Going	N/A																		
Target recruiting for key project resources		On Going	N/A																		
Continue PFP resource transition plan		On Going	N/A																		
River Corridor Closure recruitment		On Going	N/A																		
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																					
No critical risks identified in the month of August .																					
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																					
No high threat value risks identified in the month of August .																					
Unassigned Risks (Pending ownership of identified risks/opportunities)																					
CHPRC continues to conduct internal reviews to ensure risks are still valid. In cases where risk has passed/or is no longer valid CHPRC will no longer report, and close the risk in the database. In the event risk are still valid ownership will need to be established to further identify and address potential impacts to project cost and schedule. There are cases when risks are identified but are outside the control and management of the contractor. However, CHPRC risk management process identifies all risks that could impact overall project success.																					

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified.

Appendix C
Capital Asset Projects
RL-0011_C1, RL-0011_C2, and RL-0012_C1_1



August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

**Appendix C
Capital Asset Project
RL-0011_C1 - PFP D&D
(Removal of 174 Gloveboxes from 234-5Z)**



**T. E. Bratvold
Vice President for
PFP Closure Project**

**August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1**

PROJECT SUMMARY

Progress continued to work towards CD-4 closure as teams continued to prep glovebox/hoods for extraction during demolition. It is expected that final preparations will be complete on November 14, 2016. At that time gloveboxes will be staged until demolition of 234-5Z commences and completion of Capital Assets Project discrete scope will be completed. The total number of gloveboxes removed to date is at 94 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	-	-	174	164
COMPLETE KPP Rooms/Areas Ready for Demo	-	-	60	60 rooms/areas

KEY ACCOMPLISHMENTS

RL-0011_C1 Accomplishments

- Work remaining on this capital asset project is removal of the gloveboxes from the 234-5Z facility. All work associated with glovebox process equipment removal has been completed. Final preparations to support the physical removal of the remaining gloveboxes will be completed by November 14, 2016. As the project nears the ready for demolition milestone for the 234-5Z building (~February 2017), more gloveboxes will begin to be removed from the facility.

PTS Accomplishments

- None identified at this time.

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 August .										
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 August .										
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
FY2016 Risk Triggers (Risk could be realized in FY2016)										
PFP-DEMO-21: Glove Box/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 FY2016. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Mitigation action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Mitigation Assessment: Mitigation Assessment: No change in the month of August . 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 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.	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
No high threat value risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in the month of August .										
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 August .										

CRITICAL PATH SCHEDULE

The PFP Critical Schedule Path is a resource driven float path, in which the critical path starts with the removal of 26 inch process vacuum lines and various process equipment removals in the Duct level of 234-5Z. Once this is complete, 234-5Z no longer requires Vital Safety Systems and much of the Cold & Dark isolations begin. Once complete, 234-5Z is ready for demolition. Demolition of 234-5Z will occur in the following sequence: 234-5ZA, Frontside, A-Labs, Backside Rooms/PSSL, RMA Process Lines, RMC Process Lines, and the RADTU & Basement areas. Once the 234-5Z and 291-Z facilities have been demolished, the Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities* will have been met.

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	9/6/17	Progress continued to work towards CD-4 closure as teams continued to prep glovebox/hoods for extraction during demolition. It is expected that final preparations for removal will be complete on November 14, 2016. At that time gloveboxes will be staged until demolition of 234-5Z commences and completion of CAP discrete scope will be completed. There was a one day gain for the month of August as impacts are still being recognized as a result of diverting all resources on critical path to finish the ready for demolition activities in PRF. The total number of gloveboxes removed to date is at 94 percent complete.

*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.

RL-0011_C1

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



August 2016
CHPRC-2016-08, 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 MPB - RL_0011_C1 - PFP D&D (ARRA/Base)			a. FROM (YYYYMMDD) 2016 / 07 / 25										
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788			b. PHASE			b. TO (YYYYMMDD) 2016 / 08 / 21										
			c. TYPE CPAF			d. SHARE RATIO			c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (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 344,780	g. CONTRACT CEILING 327,423	h. ESTIMATED CONTRACT CEILING 344,780	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 Manager							
a. BEST CASE 332,509									c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)							
b. WORST CASE 335,276																			
c. MOST LIKELY 334,902			317,545			-17,357													
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 (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
ITEM (1)	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	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	79	19	-60	235,360	234,514	259,095	-845	-24,581	0	0	0	235,514	259,722	-24,207			
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-m-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																			
e. SUBTOTAL	0	19	79	19	-60	314,997	314,152	331,883	-845	-17,731	0	0	0	315,152	332,509	-17,357			
f. MANAGEMENT RESERVE																			
g. TOTAL	0	19	79	19	-60	314,997	314,152	331,883	-845	-17,731	0	0	0	317,545	332,509	-14,964			
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																			
a. VARIANCE ADJUSTMENT																			
b. TOTAL CONTRACT VARIANCE																			
										-845		-17,731		317,545		332,509		-14,964	

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

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

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

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME MPB - RL 0011 C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK	VARIANCE		BUDGETED COST		ACTUAL COST WORK	VARIANCE		COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
	WORK SCHEDULED (2)	WORK PERFORMED (3)	(4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	(9)	SCHEDULE (10)	COST (11)	(12a)	(12b)	(13)	(14)	(15)	(16)
35 - Business Services	0	0	0	0	0	60,427	60,427	52,580	0	7,847	0	0	0	60,427	52,580	7,847
3B - PFP Closure Project	0	19	79	19	-60	254,570	253,725	279,302	-845	-25,577	0	0	0	254,725	279,929	-25,204
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	79	19	-60	314,997	314,152	331,883	-845	-17,731	0	0	0	315,152	332,509	-17,357
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	0	19	79	19	-60	314,997	314,152	331,883	-845	-17,731	0	0	0	317,545		

CLASSIFICATION (When Filled In)

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 MPB - RL_0011_C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
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		ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)											AT COMPLETION (15)		
ORGANIZATIONAL CATEGORY (1)	(2)			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS							
				+1 SEP 2016 (4)	+2 OCT 2016 (5)	+3 NOV 2016 (6)	+4 DEC 2016 (7)	+5 JAN 2016 (8)	+6 FEB 2016 (9)	1st Qtr (10)	2nd Qtr (11)	REMAIN FY17 (12)	FY18 (13)	FY19-LC (14)			
35 - Business Services	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project	7	15403	13	18	14	0	0	0	0	1	6	0	0	0	0	0	15454
g. TOTAL DIRECT	7	15420	13	18	14	0	0	0	0	1	6	0	0	0	0	0	15470

CLASSIFICATION (When Filled In)

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) 2016/07/25		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2016/08/21		
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	79	19	-	-60	-310%	-	0.24
Cumulative:	314,997	314,152	331,883	-845	0%	-17,731	-5.6%	1.00	0.95
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	315,152	332,509	-17,357	-6%	-	1.60			

Explanation of Variance/Description of Problem:
 Current Period:
 Schedule Variance: Within Threshold
 Cost Variance: The current month negative cost variance is associated with the removal of the HC-6 pencil tanks from room 166 in 234-5Z. The original plan assumed the pencil tanks would be removed whole during demolition, however, further NDA analysis determined that if the pencil tanks were packaged and shipped as whole units, they would exceed allowable transportation limits. The new approach required manual hoisting to extract the pencil tanks from the wall and size reduction in the adjacent room. The team extracted the pencil tanks onto lift tables, size reduced, and loaded into waste containers in six days.

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

Impact:
 Schedule Impact: The RL-011.C1 project baseline completion date is November 16, 2016. The current schedule now reflects a completion date of September 6, 2017, a gain of 1 calendar days since July, 2016. The majority of RL-011.C1 field work cannot continue until 234-5Z demolition begins. The baseline completion date is not considered recoverable.

The current RL-11 performance schedule indicates that the PFP project will achieve slab-on-grade by June 22, 2017. Efficiencies have been identified in 236-Z (PRF) that allow work to be performed on filter boxes in parallel with the gallery gloveboxes allowing acceleration of the start of 236-Z demolition. This is turn accelerates when additional field team resources can be reallocated from 236-Z to 234-5Z to get the facility ready for demolition. 234-5Z contains the gloveboxes requiring removal to meet the end state of the KPP and TPA milestone. The project expects to continue progress at the rate that has been experienced in the past several months. The PFP Project is currently on track to meet the re-negotiated TPA milestone M-083-00A due date of 9/30/17 for achieving slab-on-grade.

Cost Impact: The historical negative cost variance of ~\$17.7M 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. This variance is not considered recoverable. The cost variance 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. The EAC increase of \$54K in the month of August is not significant.

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

Corrective Action:
 No Corrective Actions Required

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

- 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 August.
- Forecast Schedule with No Baseline: None in the month of August.
- UB Balance: None in the month of August.
- Negative ACWP: None in the month of August.
- EAC Analysis: Best Case = \$332,509; Most Likely = \$334,902; Worst Case = \$335,276
- 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: None in the month of August.
- Freeze Period Changes: None in the month of August.
- Retroactive Changes: None in the month of August.
- EVT Changes: None in the month of August.

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

Appendix C

Capital Asset Project

RL-0011_C2 - Demolition of PFP Facilities



T. E. Bratvold
Vice President for
PFP Closure Project

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress continued to work towards CD-4 closure as teams continued to ready the PFP facilities for demolition. It is expected that the PRF facility will initiate demolition in October 2016 and completion of demolition activities will occur late June 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 Cold and Dark/Demo Ready activities for 234-5Z	-	-	1	-
Complete Cold and Dark/Demo Ready activities for 236-Z	-	-	1	-
Complete Cold and Dark/Demo Ready activities for 242-Z	-	-	1	-
Complete Cold and Dark/Demo Ready activities for 291-Z	-	-	1	-
Complete Cold and Dark/Demo Ready activities for PFP Ancillary Facilities	-	1	15	2
Complete Demolition of 234-5Z	-	-	1	-
Complete Demolition of 236-Z	-	-	1	-
Complete Demolition of 242-Z	-	-	1	-
Complete Demolition of 291-Z	-	-	1	-
Complete Demolition of PFP Ancillary Facilities	-	1	15	2
Turnover Facility to Long Term Surveillance & Maintenance	-	-	-	-

KEY ACCOMPLISHMENTS

RL-0011_C2 Accomplishments

- Demolition of 2729Z building was completed in the month of August.
- Cold and Dark Activities for Building 2727Z were completed during the month of August.

PTS Accomplishments

- None identified at this time.

MAJOR ISSUES

- None identified at this time.

CORRECTIVE ACTION LOG

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

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

- ↑ Increased Confidence
- ↔ No Change
- ↓ Decreased Confidence

Risk Title 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 August .																
Realized Risks (Risks that are currently impacting project cost/schedule)																
No realized risks identified for RL-0011/WBS-011.05.C3 (CAP.2) in the month of August .																
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																
FY2016 Risk Triggers (Risk could be realized in FY2016)																
PFP-DEMO-21: Glove Box/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 FY2016. <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>None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Mitigation Assessment: No changes in the month of August . 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 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.	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 cross-cutting 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: \$1.5 million, 60 days	●	↔	Risk Trigger: Due to concern from stakeholders with leaving elevated gloveboxes in PRF for extraction during demolition, a new approach is being implemented to remove the gloveboxes prior to full facility demolition. This change in baseline assumptions justifies unplanned in-scope work to mitigate safety concerns, and therefore a BCR was implemented in August to utilize \$1.4 million of MR. This risk will be re-evaluated to determine if probability or consequences need to be adjusted. <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>Identify and pre-rig equipment with lifting slings.</td> <td style="text-align: center;">6/01/17</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Apply fixative to internals of equipment intended to be removed during demolition to contain contamination.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Mitigation Assessment: At this time no alternative course of actions needed.	Mitigation action(s)	FC Date	%	Identify and pre-rig equipment with lifting slings.	6/01/17	50	Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.	Ongoing	N/A	Apply fixative to internals of equipment intended to be removed during demolition to contain contamination.	Ongoing	N/A
Mitigation action(s)	FC Date	%														
Identify and pre-rig equipment with lifting slings.	6/01/17	50														
Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.	Ongoing	N/A														
Apply fixative to internals of equipment intended to be removed during demolition to contain contamination.	Ongoing	N/A														
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
FY2016 Risk Triggers (Risk could be realized in FY2016)																
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 Trigger: During pre-demolition/demolition activities in FY2016. Dates tracked in the FES. <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>None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Mitigation Assessment: No changes in the month of August . 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 develop work plans to incorporate required controls. At this time no alternative course of actions needed.	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)																
To ensure success of the project ownership needs to be established to further identify and address potential impacts to project cost and schedule. There are cases when risks are identified but are outside the control and management of the contractor. However, CHPRC risk management process identifies all risks that could impact overall project success.																

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011/WBS-011.05.C3 (CAP.2)				
PFP-DEMO-18: Level of Readiness Effort	<p>PFP Demolition activities and hazard categorization provide for a Readiness Assessment (RA); however, due to the first of its kind project at the Hanford Site, CHPRC will be directed by the customer to perform a more rigorous RA than planned resulting in cost impacts and schedule delays.</p> <p><u>CHPRC Comment:</u> The rework required between the first submittal on May 26, 2015, through the resubmittal on August 27, 2015, (Reference 2) and subsequent approval on October 8, 2015, (Reference 1) has increased cost of demolition and impacted schedule. The additional cost is due to a technical difference in the readiness scoring by RL that is not consistent with historical scoring. The addition of a readiness team and performance of an exercise versus a drill have impacted the project. The additional requirements may represent realization of previously identified risk PRC-010, Requirements Change. Accordingly, CHPRC is entitled to an adjustment to cost and fee to implement the direction. In December, a notice of change was sent to RL for the potential change. The letter was re-submitted based on RL feedback. The project continues to wait for direction from RL and will revisit after completion of the RA as actual costs will be able to be compiled.</p>			

CRITICAL PATH SCHEDULE

The PFP Critical Schedule Path is a resource driven float path, in which the critical path starts with the removal of 26 inch process vacuum lines and various process equipment removals in the Duct level of 234-5Z. Once this is complete, 234-5Z no longer requires Vital Safety Systems and much of the Cold & Dark isolations begin. Once complete, 234-5Z is ready for demolition. Demolition of 234-5Z will occur in the following sequence: 234-5ZA, Frontside, A-Labs, Backside Rooms/PPSL, RMA Process Lines, RMC Process Lines, and the RADTU & Basement areas. Once the 234-5Z and 291-Z facilities have been demolished, the Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities* will have been met.

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
RL-011.C2	Completion Demolition of all PFP Facilities	8/31/18	11/10/17	<p>Progress continued to work towards CD-4 closure as teams continued to ready the PFP facilities for demolition. It is expected that the PRF facility will initiate demolition in October, 2016 and completion of demolition activities will occur in June, 2017. A determination was made that gloveboxes in 236-Z would need to be removed from the facility prior to physical demolition of the PRF structure and to ensure demolition of the PRF facility was initiated in early FY2017.</p> <p>Resources have been diverted from other critical path work scope to ensure that this occurs. Minor efficiencies were recognized in August resulting in a gain of four days to complete slab on grade activities.</p>

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

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

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

RL-0011_C2

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



August 2016
CHPRC-2016-08, 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 RL 0011 C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

5. CONTRACT DATA								
a. QUANTITY 1	b. NEGOTIATED COST 51,683	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 5,000	e. TARGET PRICE 56,683	f. ESTIMATED PRICE 51,701	g. CONTRACT CEILING 56,683	h. ESTIMATED CONTRACT CEILING 51,701	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. WORST CASE 53,566						b. TITLE Prime Contract Manager	
c. MOST LIKELY 46,701		51,683		4,982		c. SIGNATURE	
a. BEST CASE 43,981						d. DATE SIGNED (YYYYMMDD)	

8. PERFORMANCE DATA																	
CAPN.PBS Control Account.PARS 2 WBS (2)		CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
ITEM (1)	BUDGETED COST		ACTUAL		VARIANCE	BUDGETED COST		ACTUAL		VARIANCE	REPROGRAMMING ADJUSTMENTS			BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)		COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)		SCHEDULE (10)	COST (11)	COST VARIANCE (12a)				SCHEDULE VARIANCE (12b)
RL-0011 Nuclear Mat Stab & Disp PFP																	
RL_0011_C2.05 Disposition PFP Facility	4,418	647	589	-3,771	58	29,748	8,774	9,638	-20,973	-863	0	0	0	48,963	43,981	4,982	
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d. UNDISTRIBUTED BUDGET														0	0	0	
e. SUBTOTAL	4,418	647	589	-3,771	58	29,748	8,774	9,638	-20,973	-863	0	0	0	48,963	43,981	4,982	
f. MANAGEMENT RESERVE														2,720			
g. TOTAL	4,418	647	589	-3,771	58	29,748	8,774	9,638	-20,973	-863	0	0	0	51,683			
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																	
a. VARIANCE ADJUSTMENT																	
b. TOTAL CONTRACT VARIANCE																	
														-20,973	-863		
														51,683	43,981	7,702	

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

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

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

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL 0011 C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK	VARIANCE		BUDGETED COST		ACTUAL COST WORK	VARIANCE		COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
	WORK SCHEDULED (2)	WORK PERFORMED (3)	(4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	(9)	SCHEDULE (10)	COST (11)	(12a)	(12b)	(13)	(14)	(15)	(16)
3B - PFP Closure Project	4,418	647	589	-3,771	58	29,748	8,774	9,638	-20,973	-863	0	0	0	48,963	43,981	4,982
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL (Performance Measurement Baseline)	4,418	647	589	-3,771	58	29,748	8,774	9,638	-20,973	-863	0	0	0	48,963	43,981	4,982
f. MANAGEMENT RESERVE														2,720		
g. TOTAL	4,418	647	589	-3,771	58	29,748	8,774	9,638	-20,973	-863	0	0	0	51,683		

CLASSIFICATION (When Filled In)

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) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
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		ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)											AT COMPLETION (15)
ORGANIZATIONAL CATEGORY (1)				SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS					
				+1 SEP 2016 (4)	+2 OCT 2016 (5)	+3 NOV 2016 (6)	+4 DEC 2016 (7)	+5 JAN 2016 (8)	+6 FEB 2016 (9)	1st Qtr (10)	2nd Qtr (11)	REMAIN FY17 (12)	FY18 (13)	FY19-LC (14)	
3B - PFP Closure Project		11	43	43	52	65	68	68	71	140	326	124	9	0	
g. TOTAL DIRECT		11	43	43	52	65	68	68	71	140	326	124	9	0	

CLASSIFICATION (When Filled In)

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 011- RL-11 NM Stabilization and Disposition PFP		a. FROM (YYYYMMDD) 2016/07/25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016/08/21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE		No X Yes (YYYYMMDD) 2009 / 09 / 18	

Direct Projects									
5. Evaluation	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	4,417.8	647.0		589.0	-3,770.8	-85.4%	58.0	9.0%	0.15
Cumulative:	29,747.6	8,774.4		9,637.9	-20,973.1	-70.5%	-863.4	-9.8%	0.29
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	48,963.0	43,980.9	4,982.1	10.2%	1.02	1.17			

Explanation of Variance/Description of Problem:

Current Period:
Schedule Variance: The current month negative schedule variance is due to delays in demolition of the 234-5Z and 291-Z facilities as originally planned as neither facility is currently ready for demolition. Field resources are currently focused on getting 236-Z and 242-Z followed by 234-5Z ready for demo. Efforts to get 291-Z ready for demo to follow once resources are available. Demo preparation activities in PRF were delayed due to a change in approach in electrically isolating the building. The new approach will allow the entire facility to be electrically isolated simultaneously. Demolition of 236-Z is targeted to begin October 2016, while demolition of 234-5Z is targeted to begin in late February 2017. As a result of recognized efficiencies in the ready for demolition activities, the C2 CD-4 is now scheduled to complete by 11/10/2017, a gain of four days since July. The TPA milestone M-083-00A due date of 9/30/2017 is expected to be achieved. In addition, the support activities for project management, cross-cutting support, and consumable materials, which are apportioned against discrete demolition work also account and contribute to the negative schedule variance.

Cost Variance: The current month negative cost variance is associated with MSA subcontracted resources arriving to support PFP demolition that had a planned baseline start date of January 2016. Because the project is behind schedule in initiating demolition activities, 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 initiate demolition activities as identified in the current schedule, these costs will continue to be realized resulting in a potential unrecoverable cost variance. In addition, Readiness activities are taking longer than originally assumed due to increased requirements required by the RA team to demonstrate readiness for demolition of the PRF facility.

Cumulative to Date:
Schedule Variance: The cumulative 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 the 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) and increased characterization efforts. Once the 236-Z building is ready for demo the diverted resources will be redirected to support demolition of the ancillary buildings in the fall of 2016. Initiation of demolition of the 236-Z facility is currently forecast for October 2016, with 242-Z and 234-5Z following thereafter. As a result of delays in the ready for demolition activities, the C2 CD-4 has been delayed. However, the TPA milestone M-083-00A has been re-negotiated to a due date of 9/30/2017 and is expected to be achieved. This is partially offset by the completion of demolition of the 27292 facility.

Cost Variance: The cumulative negative cost variance is associated with MSA subcontracted resources arriving to support PFP demolition that had a planned baseline start date of January 2016. Because the project is behind schedule in initiating demolition activities, 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 initiate 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 are lagging 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. Finally, 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 for the current period.

Impact:

Schedule Impact: Work efforts in getting 234-5Z ready for Cold & Dark resulted in a gain of 4 calendar days since July to the critical path to achieving the CD-4 closeout. The TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities, has been re-negotiated to September 30, 2017 and is expected to be achieved.

Cost Impact: Stop Works, Safety Pauses, 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. Subcontracted MSA resources specializing in facility demolition continue to charge the project until ready for demo status is achieved. Mitigation actions are being reviewed and, when finalized, will be put in place to partially recover the cost impact.

The positive VAC is reflective of working one shift during demolition of 236-Z and 242-Z facilities 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. The projected net EAC impact of (\$442K) since July is the result of eliminating the PQ shift on 236-Z and 242-Z demolition, which is partially offset by an increase in the Mobilization activity to carry the MSA support resources between 242-Z and 234-5Z demolition.

Corrective Action:

Cost: MSA subcontracted resources (i.e., Heavy Equipment Operators, Crane Operators, Mechanics, etc.) will be loaned out to other CHPRC and other Hanford contractors when the PFP project can support the needs of others and this offset unnecessary costs to the PFP Project. Action Mike Douglas due 09/30/2016

Schedule: The PFP project will evaluate and incorporate actions to safely and effectively recover schedule that has been lost due to delays in the ready for demolition activities associated with 234-5Z, 236-Z, 242-Z, and 291-Z in order to allow demolition of facilities in the PFP complex to begin earlier than currently forecast. Action Mike Douglas 09/30/2016

NOTE: Corrective actions associated with stop works/safety pauses, contamination events, and 236-Z Canyon Crane failure 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:
- Schedule Margin Analysis: There is currently no remaining schedule margin in this capital asset account. Schedule margin was lost in February 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.
 - IMS Data dictionary Changes: No change in the month of August
 - Forecast Schedule with No Baseline: No change in the month of August
 - UB Balance: No change in the month of August
 - Negative ACWP: No change in the month of August
 - EAC Analysis: Best Case = \$43,981; Most Likely = \$46,701; Worst Case = \$53,566
 - Negative CV > VAC: No change in the month of August
 - MR Transactions: In the month of August two Baseline Change Requests were processed impacting the MR profile for this CAP. BCR-011C-16-012R0, PRF Glovebox Removal Change in Approach (PFP C2) MR Draw was evaluated and impacts the management reserve profile reduced by \$1,432.2. Risk ID PFP-DEMO-07. Removal/Extraction of Equipment Takes Longer than Planned reflects the change in baseline assumptions, and justifies unplanned, in-scope work to mitigate safety concerns of building stability during demolition. As a result of this BCR risk id PFP-DEMO-07 will be re-evaluated to determine if the risk probability/consequences need to be adjusted. In addition, BCR-011C-16-011R0, Revision to Calendars for FY2017 and FY2018 - PFP CAP 2 was evaluated and impacted the management reserve profile by reducing the management reserve by \$1,671 due to revisions of the realized hours calendar.
 - Freeze Period Changes: BCR-011C-16-012R0, PRF Glovebox Removal Change in Approach (PFP C2) MR Draw implements changes during the CHPRC EVMS freeze period (current accounting month plus one). Per CHPRC -00003, Project Control System Description, section 4.3, Baseline Change Management, changes during the freeze period are allowed to address emerging risk items that are unplanned, in-scope work that has not been initiated that warrant a drawdown of MR, such as the change in execution strategy for glovebox removal to address safety concerns and hazard reduction implemented by this BCR.
 - Retrospective Changes: No change in the month of August
 - FVT Changes: No change in the month of August

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

Appendix C

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
(KBO&PR)

M. A. Wright
Vice President for
Project Technical
Services

August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

- RL and CHPRC personnel have agreed to draft Performance Measures (PMs) for FY2017 and these PMs have been sent to DOE HQ for concurrence. CHPRC is awaiting final verbiage, valuation, and approval from RL.
- Completed PM-12-9-16: Complete ECRTS Cold Commissioning Testing at MASF.
- Final internal reviews of the 105K West Basin DSA and TSR are in progress with submittal to DOE for approval expected next month. The DSA/TSR must be submitted, approved and implemented prior to KPAT activities that transfer 105KW Basin water out into the 105KW Basin Annex.

KEY ACCOMPLISHMENTS

RL-0012_C1_1 Accomplishments

KW Basin Sludge Retrieval Capital Assesst Project

- ECRTS Process Equipment Procurement:
 - Procurement Set #2: General Service (GS) Retrieval and Transfer System Components: Task 5/6 - The Flocculant Addition Skid Spools were receipt inspected and delivered to MASF. Task #8- The final data package for the modified Pig Staging Racks was approved and hardware was delivered to MASF. Task #14 – Replacement hoses H-301, H-302 & H-100 were received and delivered to MASF. Task #15 – HiLine received, inspected, labeled and delivered replacement spare hoses (H-204, H-214, H-217, H-417, & H-419) to AVS.
 - Procurement Set #7: 105KW Annex, Stack Monitoring System –Fabrication and electrical continuity testing of the stack sampling panel and associated components was completed. CEES completed installation of the stack sampling cabinet ventilation fan and conducted an informal factory acceptance test of the entire system.
 - Procurement Set #8: STSC Vessels – CHPRC directed ABW to perform free iron testing on STSC 410-413. Following CHPRC approval of the ABW procedure for testing and removing any identified free iron deposits (in accordance with ASTM A380 and ASTM A967), ABW completed the first set of tests. STSC 410-413 were subjected to several cycles of cleaning & retesting but these vessels still do not meet the acceptance criteria imposed by CHPRC. ABW and CHPRC personnel have collaborated on more aggressive cleaning processes and anticipate achieving the acceptance criteria of zero visual rust as defined in ASTM A380. Once the vessels are verified to be acceptable, the vessels will be repackaged and delivered to Richland, WA. STSC 404-409 were shipped from HiLine to ABW in August for free iron testing/cleaning. STSC 402-403 are going to be tested/cleaned/retested at the HiLine fabrication shop in Richland.
 - Procurement Set #9: SS STSC Assemblies (Instrumentation & Appurtenances) – Sludge Transport Cask drain port tools were delivered to MASF. HiLine is proceeding with fabrication of Sludge Transport Cask, Emergency Vent Tools. HiLine personnel have placed their STSC Instrumentation and Appurtenances contract scope on hold pending disposition of the NCRs identified in Procurement Set #8 and further direction by CHPRC. The interim disposition to clean and retest the two STSCs has been specified and will be completed by HiLine personnel in their shop.
 - Procurement Set #11: Inert Gas and Auxiliary Ventilation System: Task #6 – Receipt inspection of hose H-659 was completed by AVS and the hose was shipped to MASF. Task #7 – CEES successfully completed testing of the 2” expansion joint assemblies.
 - Procurement Set #14: SS Control Panels: Task #11 - HiLine completed fabrication, assembly, and testing of Condensate Level Junction Box ECRT-JB-502 and shipped it to AVS. Task #12 – CHPRC provided a Notice to Proceed for procurement and testing of four hoist chain stop block assemblies.

- **MPAT Execution:**
 - Completed PM-12-9-16: Complete ECRTS Cold Commissioning Testing at Maintenance and Storage Facility (MASF).
 - The MASF Testing Team continued post-test instrument calibrations, preps for equipment disassembly/removal, preparation of the MPAT Test Report, and retest/closeout of TDRs.
 - As of August 25, 149 of 160 TDRs are closed. The remaining 11 are fully dispositioned.

PTS Accomplishments

- **KW Annex Construction:**
 - Performed rounds (daily and weekly) of balance of plant equipment and CM on items identified on PM inspection list
 - Completed QA oversight of the bolt torqueing of the sand filter assembly at the fabricator.
 - Removed spool pieces from the instrument air system for shop installation of ECRTS tested instrumentation.
 - Continued development of grouting and lifting plans for Sand Filter Shielding installation.
 - Completed demobilization of Stack sampling test area.
 - Completed preparation of truck scale pit for installation of ECRTS process equipment installation
 - Continued receipt inspections for construction material/ components to support ECRTS process equipment installation.
 - Initiated shop fabrication of air spool modifications and tool shelf frames.
 - Prepped site for delivery of and initiated placement and anchorage of the sand filter shielding. Drilled holed for rebar dowels for the Sand Filter Base.
 - Initiated the installation of the sand filter base plate and formwork. Constructed work area to support grout activities.
 - Performed off site grout mock up for the sand filter shielding installation.
 - Continued rebar scan activities to support the installation of the ECRTS process equipment.

- **KW Basin In Basin Modifications Construction:**
 - Completed grouting the remaining three transfer bay spill berms and completed cleanup of work area.
 - Continued reviewing APW submittals/CGD packages and material procurements to support future construction activities.
 - Continued repair on NE corner doghouse stem wall
 - Continued receipt inspections for construction material/components to support ECRTS process equipment installation.
 - Finalized work steps in the Booster pump work package for review by HBR chairman.
 - Received proposal for evaluation, RFP/SOW for the contract to fabricate the booster pump spreader bar.
 - Continued reviewing the APW submittals/CGD packages and material procurements to support future construction activities.
 - Completed MASF mockup and training for underwater hose connects.
 - Completed mockup work package review during training the MASF.
 - Initiated receipt inspections for the construction material/components to support ERCTS process equipment installation.
 - Continued reviewing APW submittals/CGD packages and material procurements to support future construction activities.
 - Continued repair on NE Corner doghouse stem wall.
 - Finalized work steps in the Booster pump work package for review by HBR chairman.

MAJOR ISSUES

Issue:

Based upon iron contamination discoveries in STSC 402 and STSC 403, ABW was instructed to conduct free iron testing of STSC 410-413. The results of that initial test indicated that all four vessels had some level of iron contamination requiring cleaning to meet the contract acceptance criteria.

Corrective Action:

ABW Technologies, Inc. and CHPRC Technical Staff have developed procedures to aggressively remove iron contamination from STSCs and validate cleanliness via free iron testing of all 12 STSCs fabricated in FY2016 (first production run).

Status:

- o STSC 410-413 are being tested, cleaned and retested, as appropriate in Arlington, WA (ABW Fab Shop). As of September 13, STSC 410 and STSC 412 have been declared acceptable and will be shipped to the Hanford Site 9/15.
- o STSC 404-409 will all be shipped back to Arlington, WA for testing, cleaning, and retesting, as appropriate.
- o STSC 402-403 remain at HiLine (with instrumentation/appurtenances installed) and will be tested/cleaned by HiLine personnel due to the difficulty/expense of returning these vessels to Arlington, WA.
- o CHPRC and ABW Technologies, Inc. personnel continue to investigate and seek to eliminate the source of iron contamination.

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: No major changes to the monthly spotlight chart in the month of August .																								
Realized Risks (Risks that are currently impacting project cost/schedule)																								
STP-123-B: Design Maturity - ECRTS Annex/In-Basin Equip.	Finalization of design media for the ECRTS equipment installation will result in changes to both cost and schedule. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$912K, 64 days	●		<p>Risk Event: The project realized additional cost and schedule impacts in August as a result of the construction review of DCN 391, which indicated the Nitrogen and P10 bottles require weather enclosure for bottle storage (DCN-445). Other DCNs identified in the engineering action list are being developed including but not limited to: Prepare Signage Schedule (DCN-209); Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (DCN-068), Radcon related missing design-Add P-10 Gas Lines to Annex (DCN-391), Shield Cave Mounting (DCN-422), and Changes to I&C Drawing Updates (DCN-405). The project continues to evaluate the DCNs and the impacts to the project. A BCR requesting management reserve for in-scope unplanned work is projected prior to the end of FY2016.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Risk recovery action(s)</th> <th style="text-align: center;">Risk Date</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Provide weather protection for Annex Nitrogen Bottle station (DCN-445)</td> <td style="text-align: center;">06/16/16</td> <td style="text-align: center;">09/06/16</td> <td style="text-align: center;">85</td> </tr> <tr> <td>Add Hose & Valve installation at transfer box air system (Mitigation of long lead item impact by awarding procurement released to FFP under Release #2) (DCN-410)</td> <td style="text-align: center;">12/16/15</td> <td style="text-align: center;">09/08/16</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (068)</td> <td style="text-align: center;">12/16/12</td> <td style="text-align: center;">9/29/16</td> <td style="text-align: center;">80</td> </tr> <tr> <td>I&C Drawing Updates (DCN - 405)</td> <td style="text-align: center;">2/8/16</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> <p>Recovery Action Assessment: DCNs are identified and reviewed at the weekly engineering meeting to define a path forward for the pending changes. The majority of the DCNs identified to-date are expected to be cleared by September month end. Delays to DCN completion are due to the lack of scope definition for the initial recovery action and priorities and commitments Engineering and other support resources. During the weekly engineering meetings, the project identifies and reviews DCNs and define a path forward for the pending changes. A Title III Engineering manager has been hired to coordinate the design changes with the construction group. The risk will continue to be monitored by the project. No additional mitigation actions have been identified at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Provide weather protection for Annex Nitrogen Bottle station (DCN-445)	06/16/16	09/06/16	85	Add Hose & Valve installation at transfer box air system (Mitigation of long lead item impact by awarding procurement released to FFP under Release #2) (DCN-410)	12/16/15	09/08/16	75	Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (068)	12/16/12	9/29/16	80	I&C Drawing Updates (DCN - 405)	2/8/16	Complete	100
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I&C Drawing Updates (DCN - 405)	2/8/16	Complete	100																					

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																				
		Month	Trend																					
RL-0012/WBS-012 (CAP)																								
<p>STP-072: Delayed STSC/ECRTS Procurement & Delivery</p>	<p>Material delivery and fabrication issues at ECRTS vendor facilities delay the delivery of the components to the Sludge Treatment Plant (STP) resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$3,000K 120 days</p>	●	↑	<p>Risk Event: This risk has been realized. STSC 402 through 405 were shipped to HiLine for the addition of appurtenances to the vessels. While at HiLine, a level instrument test was run that involved filling the STSC with water. After emptying the vessel, areas of rust were discovered. Free Iron testing of vessels 410-413 revealed additional iron contamination of those vessels. As a result, additional testing is required to quantify this nonconforming condition.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>CHPRC Engineering to evaluate the use of alternative/stronger chemical agents.</td> <td>07/22/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Contract with National Association of Corrosion Engineers (NACE), as a corrosion expert for technical support</td> <td>07/22/16</td> <td>9/15/16</td> <td>80</td> </tr> <tr> <td>CHPRC Engineering support ABW to develop a procedure for free iron testing and cleaning of vessels 410-413 including a combination of mechanical cleaning and nitric acid passivation</td> <td>07/22/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Re-plan Field Execution Schedule (FES) activities to include a process of cleaning and delivery.</td> <td>07/22/16</td> <td>09/30/16</td> <td>80</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Evaluation of an alternate chemical agent is required to meet milestone. Processes established August 29, 2016. Contracting with NACE Certified SME to provide technical support in establishing acceptance criteria and monitoring progress to achieve receipt acceptance criteria. Testing has demonstrated that the use of Nitric Acid and pickling jell does appear to provided improved results leading to iron free vessels.</p>	Risk recovery action(s)	Risk Date	FC Date	%	CHPRC Engineering to evaluate the use of alternative/stronger chemical agents.	07/22/16	Complete	100	Contract with National Association of Corrosion Engineers (NACE), as a corrosion expert for technical support	07/22/16	9/15/16	80	CHPRC Engineering support ABW to develop a procedure for free iron testing and cleaning of vessels 410-413 including a combination of mechanical cleaning and nitric acid passivation	07/22/16	Complete	100	Re-plan Field Execution Schedule (FES) activities to include a process of cleaning and delivery.	07/22/16	09/30/16	80
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Re-plan Field Execution Schedule (FES) activities to include a process of cleaning and delivery.	07/22/16	09/30/16	80																					
<p>STP-111-B: Contractor/ Subcontractor Performance - ECRTS Annex/In-Basin Equip. Installation</p>	<p>The General Conditions Contractor and their supporting subcontractors have historically performed poorly and will be challenged on this project by compliance with project and contract flow down requirements (e.g., quality, nuclear standards, site safety requirements, subcontract management to ensure contract requirements are met, NRTL compliance, suspect counterfeit, Buy-American contract clause, Project Controls requirements, development of Construction Acceptance Testing [CAT], timely processing of submittals compliance with all the subcontract flow down requirements) as well as deployment and maintenance of key staff that are essential to safe, cost effective and on-time project delivery.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Very Likely (> 90%)</p> <p>Worst Case Impacts: \$792K, 96 days</p>	●	↔	<p>Risk Event: The project continues to experience contractor delay due to inadequate general conditions staffing. Bi-weekly notes regarding these issues are being sent to the contractor via CHPRC Contracts Department. Finding a backup for the contractor's high risk Field Work Supervisor (single point failure) continues to be an issue. The issues in August have been associated with late or missing Project Controls required data. Change orders have been caught up historically and they have hired additional GC staff to continue to maintain the pace required for proposals. The contractor found a qualified FWS backup by utilizing a contract to another high risk BOA contractor for the resource. Additionally issues regarding safety pre-start paperwork has been found to have missing signatures and incorrect information, causing delays in field activities. Material procurements are also starting to affect field execution; specifically, the wrong aggregate was ordered, causing a three day delay in the mock up for the grouting of the sand filter shielding. Also, electrical work progress has been limited due to various procurements (i.e. anchor bolts and unistrut).</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Contractor delays due to inadequate staffing/mobilization. Will work with contractor to stabilize work resource planning.</td> <td>5/17/16</td> <td>Ongoing</td> <td>NA</td> </tr> </tbody> </table> <p>Recovery Action Assessment: This is a reoccurring risk relating to the performance of the General Contractor and their supporting subcontractors. The CHPRC project team continues to work with their subcontractors to ensure the contractors are thoroughly aware of their project responsibilities and have the opportunity to complete their project scope successfully. Mitigation actions are in place that are expected to reduce the probability of the risk occurrence and reduce the potential cost and schedule impact, and the risk will continue to be monitored. No additional mitigation actions have been identified at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Contractor delays due to inadequate staffing/mobilization. Will work with contractor to stabilize work resource planning.	5/17/16	Ongoing	NA												
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																					
		Month	Trend																						
RL-0012/WBS-012 (CAP)																									
STP-103-M: MASF Pre-Operational Acceptance Testing (MPAT)	The ECRTS equipment does not operate as expected, requiring increased engineering & MASF Testing Staff Support. This will require design modifications of production hardware and changes to control system software. These modifications will negatively impacts downstream testing, construction, readiness and ECRTS Operations. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$500K, 60 days	●	↑	Risk Event: This risk has been realized. During the month of May, the second Transfer System Instrument Spool failed.																					
				<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>Procure 4 Operationally sound Transfer System Instrument Loops after corrective actions are fully implemented.</td> <td>5/31/16</td> <td>8/31/16</td> <td>50</td> </tr> <tr> <td>Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.</td> <td>5/31/16</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table>	Risk recovery action(s)	Risk Date	FC Date	%	Procure 4 Operationally sound Transfer System Instrument Loops after corrective actions are fully implemented.	5/31/16	8/31/16	50	Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.	5/31/16	Complete	100									
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Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.	5/31/16	Complete	100																						
Recovery Action Assessment: While there were 160 TDRs, many associated with equipment operating anomalies and a number of design changes to existing configuration, the technical staff was successful in addressing the balance of the challenges without impacting MPAT test duration or cost. All TDR's are now closed with the retests steps of five TDR's deferred to KPAT. The recovery action was added to pursue instrument failure analysis, track corrective action implementation, and obtain replacement instrument spool assemblies and spares. As a result, the risk strategy has been changed to control.																									
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																									
No critical risks identified in the month of August.																									
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 as a result 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"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct Full-scale testing of production hardware at MASF prior to installation at K-Basin to avoid costly replacement of malfunctioning equipment during Hot Startup.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop and refine procedures based upon feedback from testing and operations personnel.</td> <td>3/15/17</td> <td>25</td> </tr> <tr> <td>Any Technical Challenges identified at MASF will be evaluated and corrective actions established to resolve prior to completion of cold commissioning.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.</td> <td>3/15/17</td> <td>10</td> </tr> <tr> <td>Utilize 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 action(s)	FC Date	%	Conduct Full-scale testing of production hardware at MASF prior to installation at K-Basin to avoid costly replacement of malfunctioning equipment during Hot Startup.	Complete	100	Develop and refine procedures based upon feedback from testing and operations personnel.	3/15/17	25	Any Technical Challenges identified at MASF will be evaluated and corrective actions established to resolve prior to completion of cold commissioning.	Complete	100	Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.	3/15/17	10	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
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				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 Assessment: Forecasted mitigation dates are consistent with overall STP critical path schedule.																									
Unassigned Risks (Pending ownership of identified threats/opportunities)																									
No unassigned risks identified in the month of August.																									

CRITICAL PATH SCHEDULE

The critical path flows through disassembly, cleaning, & inspection of the ECRTS production hardware test loop at MASF, transporting that hardware to the 105KW Basin/Annex Facility, installation of process equipment in the 105K West Basin/Annex, KPAT of the process equipment, readiness activities, and finally, containerized sludge retrieval operations. Retrieval operations include the filling of STSCs with sludge and transferring them to T Plant, completing Tri-Party Agreement milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin* is outside contract period in FY2019.

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	8/26/2018	The forecast date includes schedule margin from the Project's risk analysis. Project schedule margin is 104 days. This is an improvement from 83 days in July. The forecast schedule was revised, based on knowledge learned from MPAT testing and the revised start of KPAT testing.

*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.

RL-0012_C1_1

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



August 2016
CHPRC-2016-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

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

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

1. CONTRACTOR		2. CONTRACT				3. PROGRAM				4. REPORT PERIOD									
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract				a. NAME 15_D_401 KW Basin Sludge Removal Project				a. FROM (YYYYMMDD) 2016 / 07 / 25									
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		c. TYPE CPAF		d. SHARE RATIO		b. PHASE				b. TO (YYYYMMDD) 2016 / 08 / 21							
5. CONTRACT DATA																			
a. QUANTITY 1	b. NEGOTIATED COST 295,873	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0		d. TARGET PROFIT/FEE 3,450	e. TARGET PRICE 299,323	f. ESTIMATED PRICE 297,275		g. CONTRACT CEILING 299,153	h. ESTIMATED CONTRACT CEILING 297,275		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 Manager								
a. BEST CASE		286,103						c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)								
b. WORST CASE		295,366																	
c. MOST LIKELY		293,825		295,873		2,048													
8. PERFORMANCE DATA																			
CAPN.PBS Control Account.PARS 2 WBS (2)		CURRENT PERIOD				CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION					
ITEM (1)		BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
		WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)								
RL-0012 SNF Stabilization & Disp		0	0	-1	0	1	156,861	156,861	156,786	0	75	0	0	0	0	0	156,861	156,786	75
RL_0012_C1_1.17 D-401 KW Bas		4,393	2,658	2,141	-1,734	517	79,266	79,325	72,327	59	6,998	0	0	0	0	0	131,120	129,317	1,803
b. COST OF MONEY		0	0	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	0	0
d. UNDISTRIBUTED BUDGET																			
e. SUBTOTAL		4,393	2,658	2,141	-1,734	517	236,127	236,186	229,113	59	7,073	0	0	0	0	0	287,981	286,103	1,878
f. MANAGEMENT RESERVE																	7,722		
g. TOTAL		4,393	2,658	2,141	-1,734	517	236,127	236,186	229,113	59	7,073	0	0	0	0	0	295,703		
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																			
a. VARIANCE ADJUSTMENT																			
b. TOTAL CONTRACT VARIANCE													59	7,073		295,703	286,103	9,600	

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

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

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

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME 15 D 401 KW Basin Sludge Removal Project		a. FROM (YYYYMMDD) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2019 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK	VARIANCE		BUDGETED COST		ACTUAL COST WORK	VARIANCE		COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
	WORK SCHEDULED (2)	WORK PERFORMED (3)	PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	PERFORMED (9)	SCHEDULE (10)	COST (11)	(12a)	(12b)	(13)	(14)	(15)	(16)
3G - K Basin Oper & Plateau Remediation Project	4,393	2,658	2,141	-1,734	517	236,127	236,186	229,113	59	7,073	0	0	0	287,981	286,103	1,878
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL (Performance Measurement Baseline)	4,393	2,658	2,141	-1,734	517	236,127	236,186	229,113	59	7,073	0	0	0	287,981	286,103	1,878
f. MANAGEMENT RESERVE														7,722		
g. TOTAL	4,393	2,658	2,141	-1,734	517	236,127	236,186	229,113	59	7,073	0	0	0	295,703		

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING**

Dollars in: FTE

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME 15 D 401 KW Basin Sludge Removal Project		a. FROM (YYYYMMDD) 2016 / 07 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 08 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2019 / 09 / 18			

5. PERFORMANCE DATA			FORECAST (Non-Cumulative)													AT COMPLETION (15)
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS							
			+1 SEP 2016 (4)	+2 OCT 2016 (5)	+3 NOV 2016 (6)	+4 DEC 2016 (7)	+5 JAN 2016 (8)	+6 FEB 2016 (9)	1st Qtr (10)	2nd Qtr (11)	REMAIN FY17 (12)	FY18 (13)	FY19-LC (14)			
3G - K Basin Oper & Plateau Remediation Proj	74	6198	88	86	93	85	84	78	78	274	231	548	0	7845		
g. TOTAL DIRECT	74	6198	88	86	93	85	84	78	78	274	231	548	0	7845		

CLASSIFICATION (When Filled In)

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) 2016/07/25		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2016/08/21		
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:	4,392.6	2,658.4	2,140.9	-1,734.2	-39.5%	517.4	19.5%	0.61	1.24
Cumulative:	236,126.8	236,186.0	229,113.3	59.2	0.0%	7,072.7	3.0%	1.00	1.03
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	287,980.8	286,103.1	1,877.8	0.0	0.88	0.91			
Explanation of Variance/Description of Problem:									
Current Period:									
Schedule Variance: BCWS is being recognized for material procurement for Sludge Transport & Storage Container (STSC) vessels 13-24, which was completed ahead of schedule. The BCWS is just now catching up to the BCWP. Also, the reidding workscope completed five months ahead of schedule. The last of the performance was claimed during the period which was minimal as the BCWS comes into the current month window. In addition, performance was over stated in the prior month for Procurement Set 9 - the negative schedule variance this month is a partial correction of this error. Another contributor to the schedule variance was implementation of the alternate contracting strategy to start contractor on-site training, in-basin work package preparation, pre-mobilization, ingress / egress and installation of HIHTL shielding dog house work ahead of plan due to slip in receipt of In-Basin Equipment for installation. The contractor training at Maintenance & Storage Facility (MASF) and review of redline drawings following cold commissioning (a risk activity) is behind schedule due to late receipt of In-Basin Equipment for installation. Training at MASF is scheduled to start the beginning of August vs July as planned, but is still anticipated to complete on schedule in mid-August.									
Cost Variance: Efficiencies have been achieved by centralizing Program Management responsibilities, which has resulted in a reduced staff level. The level of Title III support required has been less than planned, in the Annex & In-Basin facilities, due to a one month delay in the receipt of equipment and lower than anticipated requirements for design changes (to date). The project is performing the work with reduced staff. In addition, a portion of the cost variance is positive, which is due to the BCWP correction on Procurement Set 9. The Sludge Treatment Project (STP) Cold Commissioning (MASF Testing) is showing an overrun, as staff finalizes the MASF Pre-Operational Acceptance Testing (MPAT) test report and transitions to the equipment removal and transfer work scope. Overall, the project is reflecting a positive cost variance.									
Cumulative To Date:									
Schedule Variance: Within Threshold									
Cost Variance: Within Threshold									
Impact:									
Schedule Impact: The project has revised schedule to reflect delivery of equipment in stages, allowing installation to commence on time. In addition, K-Basin Pre-Operational Acceptance Testing (KPAT) activities have been revised to begin in stages, since K-Basin equipment installation is forecast to be complete prior to Annex equipment installation.									
The project continues to pursue acceleration of the first sludge container from the current plan of May 12, 2018 (non-risk adjusted date). The project is on schedule to meet TPA milestones M-016-177 "Complete 105-KW Sludge Transfer Equipment Installation" by 9/30/2017 and M-016-175 "Begin Sludge Removal from 105-KW Fuel Storage Basin" by 9/30/2018.									
Cost Impact: None identified at this time.									
The current ETC reflects the expected overall costs and further ETC adjustments will be considered as equipment continues to be moved to K-Basin. Following completion of MASF Pre-Operational Acceptance Testing (MPAT), production equipment is being disassembled, packaged and shipped to K-Basin for initiation of installation activities. Currently, the EAC is projecting \$286.1M overall for the project, against a life-cycle budget of \$288.0M.									
Corrective Action:									
Schedule: No corrective actions identified in the month of August.									
Cost: Have employees that previously supported K Basin Pre-Operational Acceptance Testing (KPAT) re-tis their hours to support MPAT.									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):									
1. Schedule Margin Analysis: Project schedule margin is 104 days. This is an improvement from 83 days in July. The forecast schedule was revised, based on knowledge learned from MPAT testing and the revised start of KPAT testing (to begin in stages, as discussed above). There were no baseline changes in August which affected the schedule margin. Project continues to evaluate schedule for efficiencies.									
2. IMS Data dictionary Changes: None in the month of August.									
3. Forecast Schedule with No Baseline: None in the month of August.									
4. UB Balance: N/A									
5. Negative ACWP: None in the month of August.									
6. EAC Analysis: Best Case = \$286,103.1; Most likely = \$293,825.4; Worst Case = \$295,108.4.									
7. Negative CV > VAC: N/A									
8. MR Transactions: BCR-012C-16-028R0 utilized \$0.283K of MR for a required adjustment in the realized hours calendar correction.									
9. Freeze Period Changes: None in the month of August.									
10. Retroactive Changes: None in the month of August.									
11. EVT Changes: None in the month of August.									
Prepared by: KaeRae Parnell			Date: 9/14/16			Approved by:			Date: