

Monthly Performance Report

April 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 10:08 am, May 26, 2016

Release Approval

Date

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J. A. Ciucci
President and Chief
Executive Officer

Monthly Performance Report

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April 2016
CHPRC-2016-04, Revision 0

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EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company advanced cleanup throughout the Hanford Site during the month of April. Major accomplishments included:

- The 324 Building, its ancillary facilities, the 300-296 Waste Site, and associated Washington Closure Hanford (WCH) employees successfully transferred to CHPRC from WCH on April 25, 2016.
- The Plutonium Finishing Plant (PFP) Closure Project completed saw cutting of walls to allow for pre-demolition removal of glove boxes HC-4 and HC-6. The project also began analysis of strong back contamination and initiated decontamination efforts.
- The Waste and Fuels Management Project (W&FMP) initiated duct installation in support of the Stabilization and Ventilation Project (W-130).
- The Soil and Groundwater Remediation Project (S&GRP) initiated upgrades to the Membrane Bio Reactors (MBR) at the 200 West Pump and Treat facility. The upgraded MBRs will increase the amount of groundwater that the facility can treat.
- The K Basin Operations and Plateau Remediation (KBO&PR) Project initiated the Maintenance and Storage Facility (MASF) Preoperational Acceptance Test (MPAT), which will test production sludge removal equipment.



Saw cutting at PFP to remove glove boxes.



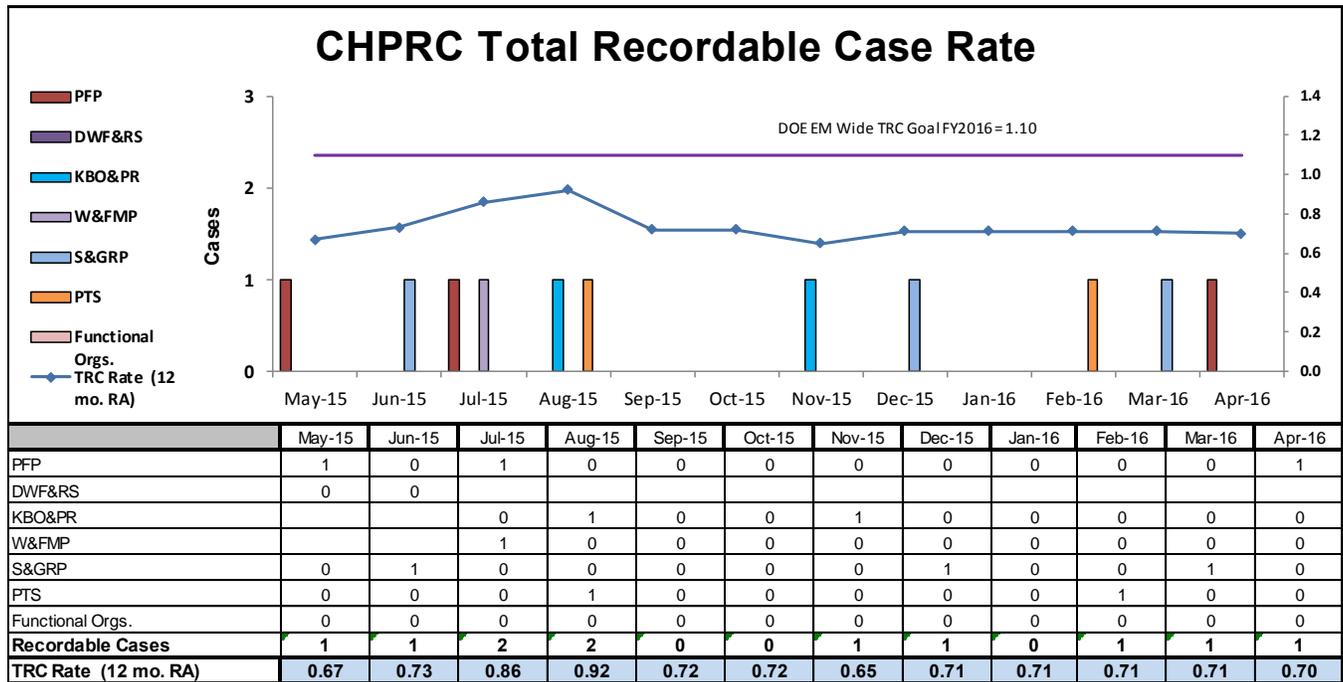
Duct installation in progress at WESF.

The April 2016 President's Zero Accident Council (PZAC) meeting was hosted by the Plutonium Finishing Plant organization.

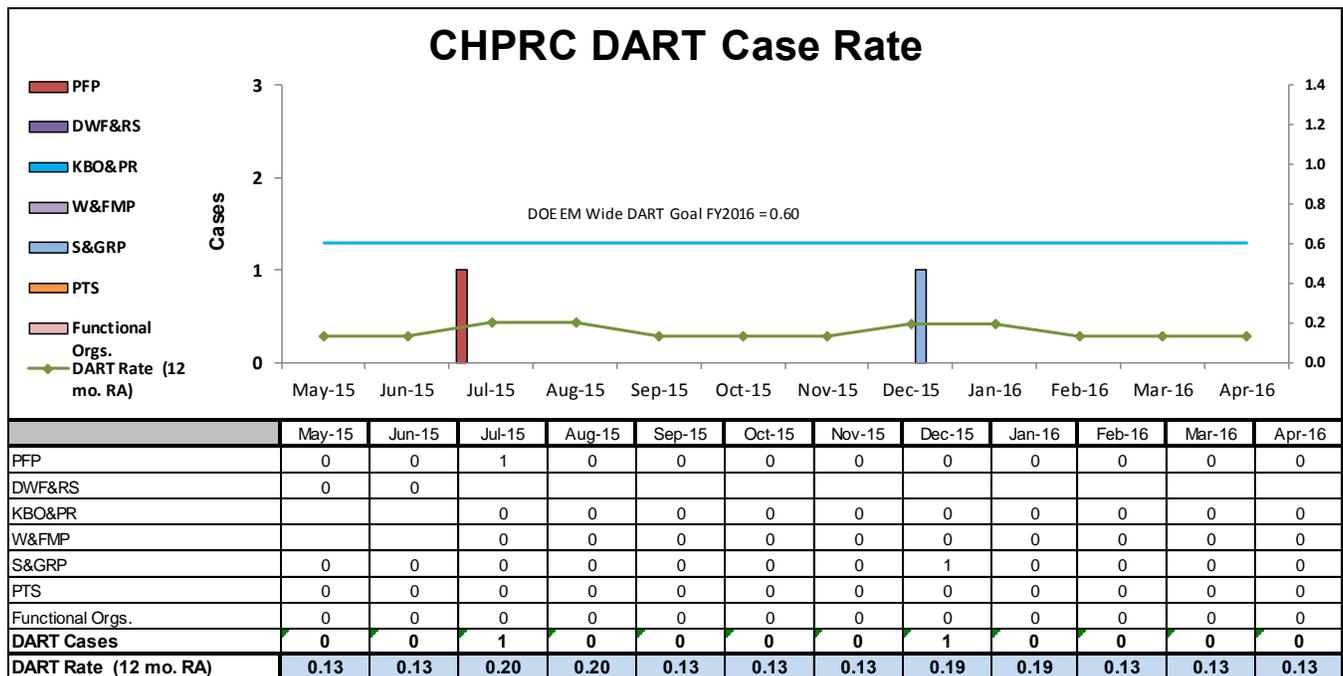
- The three main ideas for the meeting were:
 - Heat Stress Awareness.
 - Summer Safety Campaign.
 - Emergency Response.
- Four “*Thinking Target Zero*” (TTZ) bulletins were published in April to convey important occupational, safety, health, and environmental messages:
 - Eye Protection.
 - Summer Safety Kick-off.
 - April is Earth Month.
 - Summer Safety – Bees and Allergies.
- April *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
 - Four Lessons Learned: Generators near instrumentation huts produced high levels of carbon monoxide (CO); Assumptions led to inadequate hazard identification and execution of controls, which resulted in a worker partially falling into an out-of-service septic tank; Thomas Jefferson Accelerator Facility worker was lifting a rigging attachment out of a storage box and it got hung up on the lip of the box; Idaho National Laboratory parking lot incident involving a vehicle and pedestrians.
 - Personal Protection Procedure updated.
 - Social Media and CHPRC Policy.
 - Hard hat recycling.
 - MSA Ultra Elite Face piece.
 - Summer Safety Campaign.
 - Benton County Used Tire Collection Event.
- The April Kudos Corner recognized individuals and teams who made a significant contribution to safety at work, home or play:
 - Kudos to the filter box removal team at PFP for safely separating the tenth filter box in about six weeks. Their work in removing the contaminated portions of the facility's ventilation system is an important part of preparing the facility for demolition.
 - Kudos to a Solid Waste Operations Complex Health Physics Technician for having a questioning attitude when performing a routine surveillance at the Central Waste Complex (CWC). The issue was with a waste box that he believed needed additional scrutiny to ensure it was safe.
 - Kudos to two T Plant workers for their dedication to slip hazard safety and awareness. They ensure that potential slip, trip and fall hazards within T Plant are addressed immediately and posted with the appropriate signs.
 - Kudos to a PFP Industrial Hygienist for quickly responding and providing potentially life-saving first aid to a coworker who was choking and having difficulty breathing.

TARGET ZERO PERFORMANCE

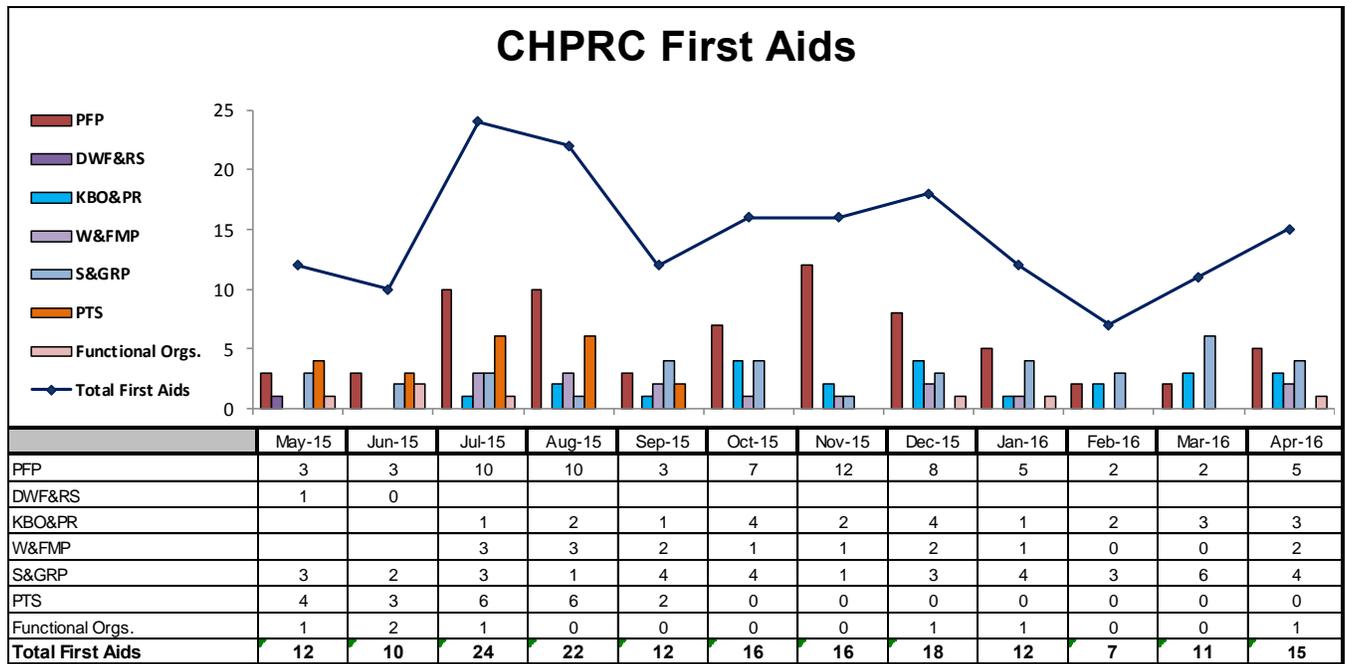
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.70 is based on a total of eleven Recordable injuries. There was one Recordable case for April. There is one case currently being evaluated for potential recordability.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.13 is based upon a total of two Days Away cases. There were no DART cases in April. There is one case being evaluated for a potential DART case.



First Aid Case Summary: CHPRC reported 15 first aid cases in April; of these, six cases required no treatment. There were two self-treated injuries. The contributors were seven sprains/strains/pains, three abrasions/bruises/contusions, three foreign bodies/irritation in the eye, one misc. (burns, rashes, repetitive motion, etc.) and one insect bite.

KEY ACCOMPLISHMENTS

Projects

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

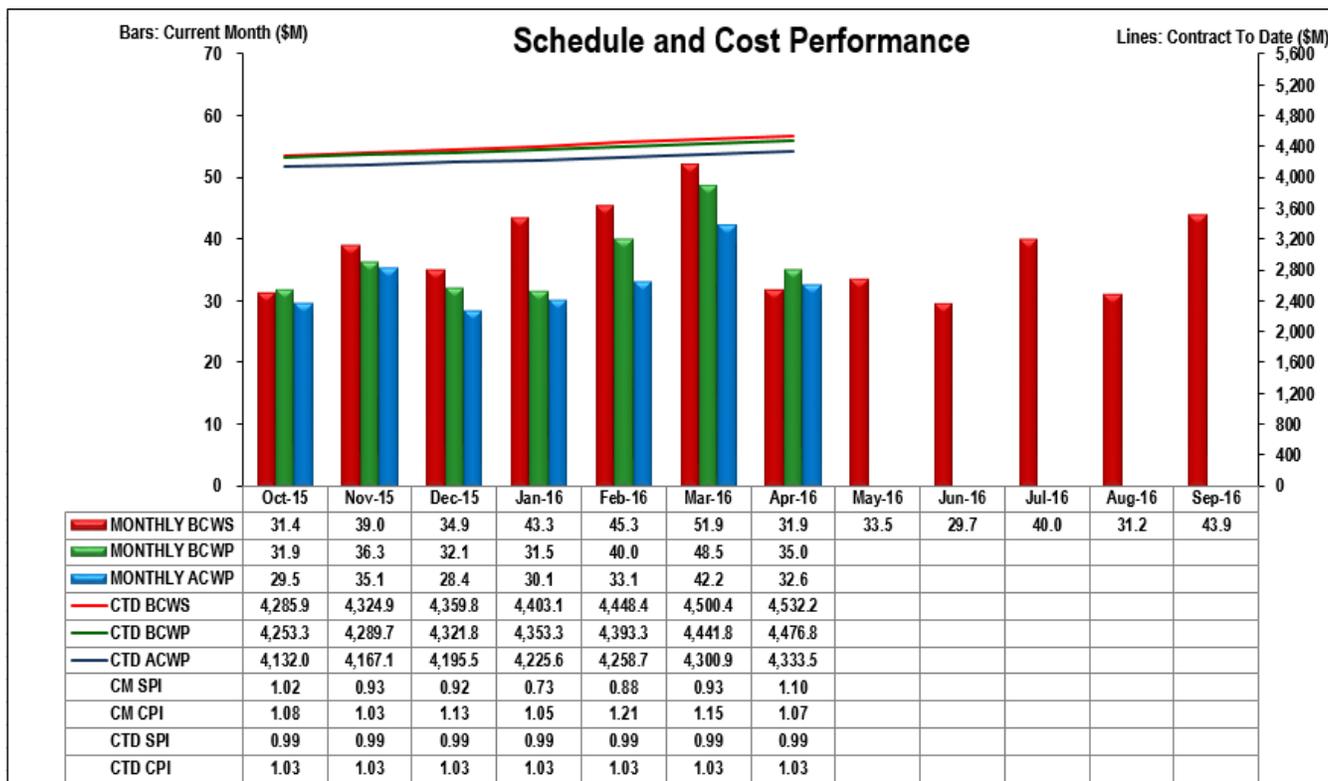
Project Services and Support

- Refer to the Appendix B section of this report for specific Project Services & Support accomplishments.

MAJOR ISSUES

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

EARNED VALUE MANAGEMENT



	\$M						\$M					\$M			
	Current Period						Contract to Date					Contract Period			
	Budgeted Cost		Actual Cost	Variance			Budgeted Cost		Actual Cost	Variance					
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance		
RL-0011 - Nuclear Materials Stab & Disp PFP	6.6	5.8	8.1	(0.8)	(2.3)	928.6	885.0	897.2	(43.7)	(12.2)	971.8	1,027.9	(56.1)		
RL-0012 - SNF Stabilization & Disposition	5.7	6.0	3.9	0.2	2.1	567.1	568.7	568.0	1.7	0.7	720.2	717.6	2.6		
RL-0013 - Solid Waste Stab & Disposition	7.8	8.2	7.7	0.5	0.5	1045.7	1045.0	979.4	(0.7)	65.6	1,333.1	1,260.6	72.6		
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	8.4	10.9	8.9	2.5	2.0	1227.8	1214.4	1190.1	(13.4)	24.4	1,564.4	1,526.5	37.9		
RL-0040 - Nuc Fac D&D - Remainder	2.5	1.3	1.3	(1.2)	0.0	414.7	411.3	379.6	(3.4)	31.7	469.1	435.3	33.9		
RL-0041 - Nuc Fac D&D - RC Closure Project	0.7	2.6	2.6	1.9	(0.0)	327.0	331.1	301.9	4.1	29.2	404.2	371.3	32.9		
RL-0042 - Nuc Fac D&D - FTF Project	0.2	0.2	0.1	(0.0)	0.0	21.2	21.3	17.3	0.0	3.9	26.5	22.9	3.6		
Total		31.9	35.0	32.6	3.1	2.4	4,532.2	4,476.8	4,333.5	(55.4)	143.3	5,489.4	5,362.1	127.3	

(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 \$127.3 million with \$92.5 million of Management Reserve (MR) for a total positive variance of \$219.8 million. For April, the project was 9.8 percent ahead of schedule and 6.9 percent under planned cost. CTD, the project was 1.2 percent behind schedule and 3.2 percent under planned cost.

The current month favorable schedule variance is primarily due to RL-0030, implementation of BCR-030-16-027R0, *Defer Unfunded Work Activities to FY2017-FY2018*. In addition, RL-0041 continued accelerated performance of AB Waste Site remediation work scope contributed to the positive variance.

The current month favorable cost variance is due to RL-0012 accrual adjustment on the Annex Construction contract, which were accrued and experienced in prior months. Also contributing to the favorable cost variance is RL-0030's efficient installation process of the MBR Cassette. The efficiencies in installation of the MBR cassettes has utilized fewer resources than planned. The variances for RL-0012 and RL-0030 are also partially offset by RL-0011's unfavorable cost variance stemming from less than planned progress on discrete D&D work scope, while incurring cost at a rate higher than planned for the work completed.

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	108.5	2.2
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	53.0	46.0	6.9
RL-0012	15-D-401 Sludge Retrieval Project	68.1	36.1	32.0
RL-0013	Waste and Fuels Management Project	106.6	92.1	14.5
RL-0030	Soil, Groundwater and Vadose Zone Remediation	124.3	118.2	6.1
RL-0040	Nuclear Facility D&D, Remainder of Hanford	23.6	21.4	2.2
RL-0041	Nuclear Facility D&D, River Corridor	24.2	21.4	2.8
RL-0042	Fast Flux Test Facility Closure	3.2	1.9	1.3
Total Spending Forecast		513.7	445.6	68.1
Incremental Scope Pending Change Management				
RL-0012	Spent Nuclear Fuel Stabilization and Disposition		0.3	(0.3)
RL-0012	15-D-401 Sludge Retrieval Project		0.3	(0.3)
RL-0013	Waste and Fuels Management Project		12.3	(12.3)
RL-0030	Soil, Groundwater and Vadose Zone Remediation		0.3	(0.3)
RL-0040	Nuclear Facility D&D, Remainder of Hanford		0.1	(0.1)
RL-0041	Nuclear Facility D&D, River Corridor		20.0	(20.0)
Total Non-Contract Work Scope		0.0	33.3	(33.3)
Total Base:				
RL-0011	Nuclear Materials Stabilization and Disposition	110.7	108.5	2.2
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	53.0	46.3	6.7
RL-0012	15-D-401 Sludge Retrieval Project	68.1	36.4	31.7
RL-0013	Waste and Fuels Management Project	106.6	104.4	2.2
RL-0030	Soil, Groundwater and Vadose Zone Remediation	124.3	118.5	5.8
RL-0040	Nuclear Facility D&D, Remainder of Hanford	23.6	21.5	2.1
RL-0041	Nuclear Facility D&D, River Corridor	24.2	41.4	(17.2)
RL-0042	Fast Flux Test Facility Closure	3.2	1.9	1.3
Total Base:		513.7	478.9	34.8

Funds/Variance Analysis

FY2016 expected funding was increased by \$4.5 million in April providing additional funding in PBS RL-0041 for River Corridor Contract Transition (RCCC) and 100K Area AB Waste Sites remediation. FY2016 expected funding is now \$513.7 million. The Fiscal Year Spending Forecast (FYSF) was increased primarily in PBS RL-0011 for additional labor resources.

BASELINE CHANGE REQUESTS

In April 2016, CHPRC approved and implemented fifteen (15) BCRs impacting the Performance Measurement Baseline (PMB). Each change request is identified in the table below:

Change Request #	Title	Summary of Change
BCR-011-16-005R0	<i>Definitization of CO #297, PFP Slab Removal Documentation</i>	This BCR incorporated the definitization of Change Oder (CO) #297 as documented in Contract Modification (CM) 497. As the definitized value is equal in scope and budget to the Not To Exceed (NTE) that was previously incorporated into the PMB. This BCR does not change the PMB value.
BCR-012-16-013R0	<i>Incorporate CO #300 100-KW Garnet Filter Media Remediation</i>	This BCR increased the scope to the revised NTE value for CO #300 to continue the Design work for the project as documented in CM 494. This BCR increased the PMB by \$176K.
BCR-012-16-014R0	<i>Move T Plant Sludge Storage Fabrication to GPP WBS</i>	This BCR moved the T Plant Fabrication scope from expense WBS elements to the newly created GPP WBS structure. This BCR does not change the PMB value.
BCR-012C-16-016R0	<i>Incorporate CAP 15-D-401 Sludge Retrieval Project Risk</i>	This BCR incorporated the results of the updated risk evaluation for Capital Asset Project (CAP) 15-D-401 Sludge Retrieval Project to assign MR to the project. This BCR does not change the PMB value.
BCR-013-16-020R0	<i>Definitization of CO #279, SWITS Bar Code Reader</i>	This BCR incorporated the definitized scope and budget into the PMB for CO #279 as documented in CM 486. This BCR increased the PMB by \$77K.
BCR-013-16-021R0	<i>Definitization of CO #276, Additional WESF Occupancy</i>	This BCR incorporated the definitized scope and budget into the PMB for CO #276 as documented in CM 488. This BCR increased the PMB by \$765K.
BCR-030-16-023R0	<i>Definitization of CO #293, 100-BC-5 RI/FS Decisional Rewrite</i>	This BCR incorporated the definitized scope and budget into the PMB for CO #293 as documented in CM 500. This BCR increased the PMB by \$336K.
BCR-030-16-024R0	<i>Definitization of CO #266, 200-BP-5 Operable Unit Construction and Operations and Maintenance of Transfer Pipelines</i>	This BCR incorporated the definitized scope and budget into the PMB for CO #266 as documented in CM 487. This BCR increased the PMB by \$5,329K.
BCR-030-16-025R0	<i>Incorporate Realized Risks for 300-FF-5 Stage B Installation & Treatment</i>	This BCR incorporated realized risks for 300-FF-5 Stage B Installation & Treatment by draw down of Management Reserve. This BCR increased the PMB by \$3,356K.
BCR-030-16-026R0	<i>Definitization of CO #298 200 IS-1 Waste Site Change Package and WP Update</i>	This BCR incorporated the definitized scope and budget into the PMB for CO #298 as documented in CM 484. This BCR increased the PMB by \$240K.
BCR-030-16-027R0	<i>RL-0030 Defer Unfunded Work Activities to FY2017-FY2018</i>	This BCR deferred work scope that is not funded in the FY2016 priority and budget guidance. This BCR does not change the PMB value.
BCR-030-16-028R0	<i>200-UP-1 Opportunistic Sampling</i>	This BCR incorporated added scope associated with 200-UP-1 opportunistic sampling vadose zone. The added scope associated with the opportunistic samples should be collected during the drilling of 200-UP-1 was offset by reduced scope for 200-EA-1 characterization. This BCR does not change the PMB value.

Change Request #	Title	Summary of Change
BCR-030-16-031R0	<i>100-D/H PP Waste Site Evaluation</i>	This BCR incorporated approximately 100 interim remediated waste sites in the 100-D/H Area against the final cleanup levels that are currently part of the 100-D/H Proposed Plan (PP). This BCR does not change the PMB value.
BCR-040-16-009R0	<i>Definitization of REA 040 1449, Surveillance, Maintenance and Decommissioning for 200-ZP-1 Process Facility and Ancillary Buildings.</i>	This BCR incorporated the definitized scope and budget into the PMB for REA 040 1449, as documented in CM 496. This BCR increased the PMB by \$147K.

The Allocated (Distributed) Budget increased by \$10,427K.

Undistributed Budget Activity

BCR Number	Title	Fiscal Year	UB
BCR-PRC-16-039R0	<i>Undistributed Budget Adjustments April 2016</i>	2015 - 2018	\$ -6,951K

The Undistributed Budget decreased by \$6,951K for an overall increase to the PMB of \$3,476K during April.

Management Reserve Activity

BCR Number	Title	Fiscal Year	MR
BCR-PRC-16-040R0	<i>Realignment of Management Reserve</i>	2015 - 2018	\$0K
BCR-030-16-025R0	<i>Incorporate Realized Risks for 300-FF-5 Stage B Installation & Treatment</i>	2015 - 2018	\$-3,356K
BCR-012C-16-016R0	<i>Establish CAP 15-D-401 Sludge Retrieval Project Management Reserve Values</i>	2015 - 2018	\$0K

Overall, there was a decrease of \$3,356K to Management Reserve (MR) during April.

Fee Activity

BCR Number	Title	Fiscal Year	Fee
BCR-013-16-020R0	<i>Definitization of CO #279 SWITS Bar Code Reader</i>	2015 - 2018	\$12K
BCR-013-16-021R0	<i>Definitization of CO #276, Additional WESF Occupancy</i>	2015 - 2018	\$47K
BCR-030-16-023R0	<i>Definitization of CO #293 100-BC-5 RI-FS Rewrite</i>	2015 - 2018	\$76K
BCR-030-16-024R0	<i>Definitization of CO #266, 200 BP-5 OU Construction and O&M of Transfer Pipelines</i>	2015 - 2018	\$384K
BCR-030-16-026R0	<i>Definitization of CO #298, 200 IS-1 Waste Site Change Package and WP Update</i>	2015 - 2018	\$15K

BCR-040-16-009R0	<i>Definitization of REA 040 1449, Surveillance, Maintenance & Decommissioning for 200-ZP-1 Process & Ancillary Buildings</i>	2015 - 2018	\$7K
BCR-011-16-005R0	<i>Definitization of CO #297 PFP Slab Removal Documentation</i>	2015 - 2018	\$6K
BCR-PRC-16-036R0	<i>Incorporate FY2016 Fee Adjustment</i>	2015 - 2018	\$4,900K

Overall, there was an increase of \$5,447K to Fee during April.

See the Format 3 Report in Appendix A for a complete listing of the specific change requests and the 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):

April 2016 Summary of Changes

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
<i>February 2016 Estimate</i>									
PMB	3,391,477	391,653	471,323	462,986	421,032	347,480	2,094,474	5,485,951	5,485,951
MR	0	0	0	21,036	33,867	40,921	95,824	95,824	95,823
Fee	155,504	14,325	14,501	22,251	9,476	17,835	78,388	233,892	233,892
Total	3,546,981	405,978	485,824	506,273	464,375	406,236	2,268,686	5,815,667	5,815,666
<i>March 2016 Change</i>									
PMB									
<i>Change to PMB</i>	0	0	0	-6,995	742	9,729	3,476	3,476	3,476
MR									
<i>Change to MR</i>	0	0	0	11,789	1,747	-16,892	-3,356	-3,356	-3,356
Fee									
<i>Change to Fee</i>	0	0	0	5,052	220	176	5,447	5,447	5,447
Total Change	0	0	0	9,845	2,709	-6,987	5,567	5,567	5,567
<i>March 2016 Estimate</i>									
PMB	3,391,477	391,653	471,323	455,991	421,774	357,209	2,097,950	5,489,426	5,489,426
MR	0	0	0	32,825	35,614	24,029	92,468	92,468	92,467
Fee	155,504	14,325	14,501	27,303	9,696	18,011	83,835	239,339	239,339
Total	3,546,981	405,978	485,824	516,118	467,084	399,249	2,274,253	5,821,233	5,821,233

Changes to/Utilization of Management Reserve in April 2016

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
March 2016 MR Totals								
RL-0011	0	0	0	5,879	3,257	0	9,136	9,136
RL-0012	0	0	0	4,134	7,206	7,158	18,498	18,498
RL-0013	0	0	0	2,999	8,200	12,425	23,624	23,624
RL-0030	0	0	0	2,777	7,949	12,370	23,095	23,095
RL-0040	0	0	0	2,979	2,257	1,761	6,997	6,997
RL-0041	0	0	0	4,096	2,800	7,000	13,896	13,896
RL-0042	0	0	0	150	220	207	576	576
Total	0	0	0	23,014	31,889	40,921	95,823	95,823
April 2016 MR Changes/Utilization								
RL-0011	0	0	0	1,706	4,117	0	5,823	5,823
RL-0012	0	0	0	2,384	6,914	3,187	12,485	12,485
RL-0013	0	0	0	5,073	-6,484	-9,757	-11,167	-11,167
RL-0030	0	0	0	3,892	-1,449	-9,150	-6,706	-6,706
RL-0040	0	0	0	-1,164	-1,316	-1,079	-3,560	-3,560
RL-0041	0	0	0	0	0	0	0	0
RL-0042	0	0	0	-103	-36	-93	-232	-232
Total	0	0	0	11,789	1,747	-16,892	-3,356	-3,356
April 2016 MR Totals								
RL-0011	0	0	0	7,585	7,375	0	14,959	14,959
RL-0012	0	0	0	6,519	14,120	10,345	30,984	30,984
RL-0013	0	0	0	8,072	1,716	2,668	12,457	12,457
RL-0030	0	0	0	6,669	6,500	3,220	16,389	16,389
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	34,803	33,635	24,029	92,467	92,467

SELF-PERFORMED WORK

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

Contract-to-Date Actual Awards & Mods				Projection to FY2018	
10/1/2008 - 4/30/2016				Planned Subcontracting:	\$2,564,285,972
Reporting Category				Contract-to-date awards:	\$2,340,607,569
				Bal remaining to award:	\$223,678,403
	\$ Value	%	Goal %	Goal award\$	Bal to Goal
SB	\$1,234,645,503	52.75%	49.3%	\$1,264,192,984	\$29,547,482
SDB	\$213,599,927	9.13%	8.2%	\$210,271,450	-\$3,328,477
SWOB	\$245,450,057	10.49%	7.5%	\$192,321,448	-\$53,128,609
HUB	\$47,563,983	2.03%	2.2%	\$56,414,291	\$8,850,309
VOSB	\$159,394,850	6.81%	3.5%	\$89,750,009	-\$69,644,841
SDVO	\$84,711,200	3.62%	1.3%	\$33,335,718	-\$51,375,482
NAB	\$40,840,971	1.74%	N/A	PRC clause H.20 small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
Large	\$616,540,045	26.34%	N/A		
GOVT	\$2,374,236	0.10%	N/A		
GOVT CONT	\$482,866,522	20.63%	N/A		
EDUCATION	\$104,135	0.00%	N/A		
NONPROFIT_	\$3,713,691	0.16%	N/A	CHPRC Contract Value:	\$5,732,255,464
FOREIGN	\$363,437	0.02%	N/A	17% rqmt:	\$974,483,429
Total	\$2,340,607,569	100.00%	N/A	SB actual:	\$1,234,645,503
				Bal to rqmt	-\$260,162,074

Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.3 billion in goods and services with over 52 percent going to small businesses. Nearly all subcontracting goals have been exceeded.
2. Approximately 93 percent of the total dollars arise from service and staffing contracts and contract amendments with five percent of the remaining expenditures arising from P-Card purchases and 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.2.3.6	PBS-0013, Transuranic Waste Certification	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office.	Ongoing

Section A

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



T. E. Bratvold
Vice President for
PFP Closure Project

April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

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

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
Glovebox/ Hood Removed or Dispositioned in Place	-	228 gloveboxes/hoods
KPP Rooms/Areas Ready for Demo	-	60 rooms/areas
Asbestos/ACM Removed	1,145	25,776 feet
Process Vacuum Piping Dispositioned	-	3,907 feet
COMPLETE Process Transfer Line Dispositioned	-	1,525 feet
Pencil Tank Units Removed (Shipped)	-	196 pencil tank units
Buildings Ready for Demo	1	44 structures
Buildings Demolished or Removed	1	44 structures
Non-radioactive Waste Shipped	0	73 m ³
TRU/TRU-M Shipped	20m ³	2,133 m ³
LLW/MLLW Shipped	63m ³	7,021 m ³

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 98 percent complete.

Significant accomplishments in April included:

- Completed implementation of Document Safety Analysis (DSA)/Technical Safety Requirement (TSR) Revision 13.
- Initiated transition of 234-5Z and 242-Z into the DSA Pre-Demolition phase.
- Pressure washed the 236-Z PRF Canyon walls.
- Performed 236-Z PRF Gallery Glovebox chemical drain line isolations.
- Initiated vacuuming of the 236-Z PRF Gallery Gloveboxes.
- Completed size reduction of filter boxes 1P and 3P.
- Completed separation of filter box 9B.
- Abated 1,145 feet of asbestos.
- Setup for and completed saw cutting of Room 166 vault to remove HC-4 and HC-6 Gloveboxes.
- Shipped 20m³ TRU/TRU-M Waste.
- Shipped 63m³ LLW/MLLW.

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	02/29/16	90% Renegotiating Due Dates
			2. Issue report documenting thorough inspection of 242-Z	03/31/16	42% Renegotiating Due Dates
			3. Issue report documenting thorough inspection of 234-5Z	06/30/16	Renegotiating Due Dates
			4. Issue report documenting thorough inspection of 291-Z	09/30/16	Renegotiating Due Dates
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	1	2	<ul style="list-style-type: none"> 4/11/16 – After dropping wood cribbing onto concrete slab, employee complained of eye irritation and pain. HPMC examined and diagnosed as corneal disorder. Eye doctor found scratch on eye. Employee was prescribed medication, reexamined by doctor and released for work without restriction. (23979)
First Aid Cases	5	70	<ul style="list-style-type: none"> 4/4/16 - Employee got something right eye and reported eye problem the next day. He was taken to HPMC, examined and diagnosed with disorder of right eye. No treatment was given and he was directed to follow-up with a private medical provider. Eye doctor examined and diagnosed a broken blood vessel in right eye. Employee was released to return to work without restriction. (23972) 4/7/16 - Employee tripped and fell into wall, extending left arm, jamming left wrist. Employee was taken to HPMC, examined and diagnosed as having a left wrist sprain/strain. No treatment was given and he was released to return to work without restriction. (23974) 4/18/16 - Employee was working on CO/O2 sensor for Breathing Air Compressor A. He received a minor scratch on his right hand from the corner of the metal access panel. Because he was going into a radiation zone, he was taken to HPMC for a zone bandage. He was examined and diagnosed as having an abrasion to his right hand. A zone dressing was applied and he was released to return to work with a restriction to protect the wound from contamination potential. (23986) 4/26/16 - An insect flew under employee's glasses and into right eye. She flushed her eye with the water and was taken to HPMC, examined and diagnosed as having a foreign body in her right eye. Eye was irrigated, a cold pack administered, and non-prescription drugs were given. Employee was released to return to work without restrictions. (23992) 4/28/2016 - Employee tripped walking up stairs and hit his right knee. Was given Brace/Tape (for Support) and returned to work with no restriction. (23994)
Near Misses	0	0	

KEY ACCOMPLISHMENTS

11.02 Maintain Safe & Compliant PFP

- Completed implementation of DSA/TSR Revision 13.
- Initiated transition of 234-5Z and 242-Z into the DSA Pre-Demolition phase.

11.05 Disposition PFP Facility

234-5Z

- Duct Level:
 - Completed size reduction of filter boxes 1P and 3P.
 - Completed separation of filter box 9B.
 - Abated 1,145 feet of asbestos.
- Main Floor
 - Set-up and completed saw cutting of Room 166 vault to remove HC-4 and HC-6 Gloveboxes.

PFP Waste Operations

- Shipped 20m³ TRU/TRU-M waste.
- Shipped 63m³ LLW/MLLW.

236-Z PRF

- Canyon:
 - Pressure washed the 236-Z PRF Canyon walls.
- Gallery Gloveboxes:
 - Performed 236-Z PRF Gallery Glovebox chemical drain line isolations.
 - Initiated vacuuming of the 236-Z PRF Gallery Gloveboxes.

242-Z

- Re-entered 242-Z to complete ready for demolition activities.
- Performed sampling and characterization of Tanks.

MAJOR ISSUES

Issue:

PRF Canyon floor scrapings from J Pan, staged in collection trays on the Canyon floor expanded resulting in a clear and unanticipated chemical reaction. A previously noted hard substance was observed within the loose debris on J Pan. This hard substance was originally thought to be concrete (congealed, spalled wall fines) but upon further review was believed to be a plasticized material, which was not unexpected.

Corrective Action:

- Unpackage and place previously packaged J Pan waste back in the PRF Canyon.
- Develop waste packaging instructions for J Pan wastes.
- PFP will perform a visual inspection of waste drums that contain PRF canyon waste prior to shipment from the facility.

Status:

- Waste packaging instructions for J Pan wastes were developed and waste has been packaged per the waste packaging instructions.
- PFP is performing 100 percent visual inspections of waste drums that contain PRF canyon waste prior to shipment.
- Waste Shipment of PRF Canyon Waste to CWC has commenced with shipment of Non-J Pan wastes. PNNL analysis of waste samples is complete. Fauske and Associates have been contracted to evaluate the potential for a self-accelerating thermal reaction within drums.

Issue:

On April 28, 2016, the wire rope on the PRF Crane jumped a sheave on the drum causing the rope to jam in the block during re-installation of a canyon strong back. The crane and strong back were placed in a safe configuration while a plan was developed to investigate the issue.

Corrective Action:

- Perform a canyon entry to inspect the wire rope and sheaves.
- Re-string the wire rope back onto the drum and block sheaves.
- Perform wire rope inspection and test functionality of crane.

Status:

- Initial inspection of viewable wire rope indicates minimal damage.
- Wire rope has been realigned on the drum.
- Wire rope is planned to be realigned on the block on May 26, 2016 followed by a complete wire rope inspection and functionality test.

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 April .																						
Realized Risks (Risks that are currently impacting project cost/schedule)																						
No realized risks identified for RL-0011 in the month of April .																						
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: \$158K, 20 days	●	↔	<p>Risk Trigger: Will continue throughout project lifecycle until Demolition activities commence.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <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>Devise new multiple sensor NDA characterization plans that allow for improved quantification of residual MAR while deactivation work is ongoing.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Perform gamma imaging surveys in conjunction with final PRF canyon cleanup to strategically focus final decontamination.</td> <td style="text-align: center;">6/13/16</td> <td style="text-align: center;">75</td> </tr> <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;">5/26/16</td> <td style="text-align: center;">90</td> </tr> <tr> <td>Develop SAP for steam lines in 291-Z fanhouse to confirm current TSI labelling. There is likelihood that steam lines were presumptively labelled and may not require abatement.</td> <td style="text-align: center;">5/19/16</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Complete 234-5Z Duct Level and backside inspections to identify piping with TSI dropping through to the first floor ceiling void.</td> <td style="text-align: center;">6/23/16</td> <td style="text-align: center;">85</td> </tr> </tbody> </table> <p>Mitigation Assessment: The risk component associated with final characterization of the PRF canyon, gallery gloveboxes, and strongbacks remains critical. This is due to the likelihood that final characterization could demonstrate, after completion of current cleanup activity, that further decontamination of structures and components is necessary. Mitigation actions are being completed in conjunction with ongoing cleanup activity in progress; therefore, risk mitigation is linked to the progress of the deactivation crews. The added gamma imaging performed this month collaborated NDA of waste material removed by deactivation, affirming the effectiveness of this tool in guiding decontamination efforts prior to application of fixatives in the canyon. Forecast completion of this mitigation effort has been adjusted to coincide with the scheduled period for fixative application. A draft revision to the DQO has been completed. The forecast date has been adjusted to allow for review/comment by Nuclear Safety, Rad Protection, NDA, and Safeguards programs prior to final issue. The risk component associated with late discovery of asbestos in need of further removal/abatement is no longer critical. Duct level inspections of crawlspaces are in progress. Confirmation of TSI in and above the A-labs resulted in allocation of insulator resources to commence abatement activity, which has slowed progress toward completion of remaining inspections. Because inspections to date have cleared areas where up to 580 feet of TSI was believed to be present, project priority has been placed on abating TSI as it is discovered. The forecast date for completion of remaining TSI inspections has been adjusted accordingly. 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 ETC. No alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	Devise new multiple sensor NDA characterization plans that allow for improved quantification of residual MAR while deactivation work is ongoing.	Complete	100	Perform gamma imaging surveys in conjunction with final PRF canyon cleanup to strategically focus final decontamination.	6/13/16	75	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	5/26/16	90	Develop SAP for steam lines in 291-Z fanhouse to confirm current TSI labelling. There is likelihood that steam lines were presumptively labelled and may not require abatement.	5/19/16	75	Complete 234-5Z Duct Level and backside inspections to identify piping with TSI dropping through to the first floor ceiling void.	6/23/16	85
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0011/WBS-011.OA													
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: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$0, 16 days *Cost increase will result in cost per day impacts from crews, and hotel load.			Risk Trigger: 07/06/2015									
				<table border="1" style="width: 100%;"> <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 2 to the PNNL Air Dispersion Model</td> <td style="text-align: center;">5/26/16</td> <td style="text-align: center;">90</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;">6/10/16</td> <td style="text-align: center;">50</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Process Revision 2 to the PNNL Air Dispersion Model	5/26/16	90	Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.	6/10/16	50
				Mitigation action(s)	FC Date	%							
				Process Revision 2 to the PNNL Air Dispersion Model	5/26/16	90							
Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.	6/10/16	50											
Mitigation Assessment: In April, PNNL issued Revision 2 (draft) to the Air Dispersion Modeling Report, which captured a conservative estimate of MAR associated with PRF canyon strongbacks and an extended demolition duration. Final issue after review and comment is not expected until the end of May 2016. Competing commitments and priorities at PNNL contributed to the delays for issue of the draft. Follow-on discussions with regulators after the air dispersion model update has been received will be completed two weeks after receipt and review of final report. This slip in the forecasted completion date is reflected above. This risk will remain open until Revision 2 of the air dispersion model is completed and it is determined that the risk no longer poses a threat. At this time no alternative course of actions needed.													
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
FY2016 Risk Triggers (Risk could be realized in FY2016)													
PFP-PRF-22: OPP: NDA Process Allows for Section Results to be used	Improved NDA process allows for disposition of Gallery Gloveboxes into waste containers by using section data rather than summation of entire glovebox, resulting in schedule efficiencies. Risk Handling Strategy: Exploit Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 60 days *Cost savings will result in cost per day from crews, and hotel load.			Risk Trigger: During glovebox isolations NDA process allows for section results to be used.									
				<table border="1" style="width: 100%;"> <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>Complete West Gallery Glovebox Isolation - 2nd Floor, Vacuum Gallery Gloveboxes, And Wipe Down and Decon, Apply Fixative, and Characterize.</td> <td style="text-align: center;">6/22/16</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Complete West Gallery Glovebox Isolation - 2nd Floor, Vacuum Gallery Gloveboxes, And Wipe Down and Decon, Apply Fixative, and Characterize.	6/22/16	4			
				Mitigation action(s)	FC Date	%							
				Complete West Gallery Glovebox Isolation - 2nd Floor, Vacuum Gallery Gloveboxes, And Wipe Down and Decon, Apply Fixative, and Characterize.	6/22/16	4							
Mitigation Assessment: The forecasted completion date for completing the West Gallery Glovebox Isolation slipped one week in the month of April. The delay in completing the mitigation action is due to the deactivation crew availability. The delay does not result in an alternative course of action at this time and there are no foreseeable impacts in the near future. The opportunity will continue to be tracked and monitored throughout the Gallery Glovebox subproject lifecycle. No alternative course of actions needed at this time.													
Unassigned Risks (Pending ownership of identified risks/opportunities)													
No unassigned risks identified in the month of April.													

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	6.6	5.8	8.1	(0.8)	-12.1%	(2.3)	-39.1%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (-\$0.8M/-12.1%)

The current period unfavorable schedule variance is primarily due to workscope associated with the demolition of 236-Z (PRF) not being performed as originally scheduled due to ready for demolition activities lagging. The PRF ready for demolition activities driving this delay are unplanned removal of the strong backs to support safeguards termination and the more complex than planned work associated with cleanout of the gallery gloveboxes. In addition, apportioned progress on D&D discrete field work is also driving this variance and includes: the balance of 291-Z work that was planned to be completed in fiscal month March. Due to resources being assigned to higher priority critical path work, 291-Z scope has not been performed. Also contributing to this variance are resources that are being diverted to other critical path work scope associated with decommissioning of the 234-5Z and 236-Z facilities. This is partially offset by completing nearly all of the PFP yard cold & dark and asbestos removal activities prior to the baseline schedule date and recognized efficiencies as a result of increasing team support for Gallery Glovebox work scope and the Carbon Tet chemical draining/verification activities being performed earlier than originally planned.

CM Cost Variance: (-\$2.3M/-39.1%)

The current period unfavorable cost variance primarily relates to the lack of progress on discrete D&D work scope (apportioned) while a constant staff provides D&D support services. It is also associated with continued charging with no BCWS. This is a result of the behind schedule work scope to support ready for demolition activities resulting in the need for an extension of the Min-Safe hotel loading until the facility is ready for demolition. Increased support to eliminate backlog of required preventative maintenance activities is also contributing to this variance. Subcontracted labor support costs being higher than planned due to extended discrete field work and consumable materials costing more than planned due to the extended duration of the discrete field work and increased radiological survey requirements on Personal Protective Equipment (PPE) continue to contribute to this variance. This is partially offset by less than planned Demolition Cross Cut support charges, which were the result of the delay in demolition.

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	928.6	885.0	897.2	(43.7)	-4.7%	(12.2)	-1.4%	971.8	1,028	(56.1)

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Variance (-\$43.7M/-4.7%)

The Schedule Variance is within reporting thresholds.

CTD Cost Variance (-\$12.2M/-1.4%)

The Cost Variance is within reporting thresholds.

Variance at Completion (-\$56.1M/-5.8%)

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. The project is not expected to meet the Tri-Party Agreement milestone of slab on grade by September 30, 2016.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	110.7	108.5	2.2
Incremental Scope Pending Change Management	0	0	0
RL-0011 - Total	110.7	108.5	2.2

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

FY2016 expected funding for RL-0011 remained steady at \$110.7 million. The FYSF for April increased from \$103.5 million to \$108.5 million as a result of the change in project approach to retain all existing staff until the 234-5Z facility is ready for demolition in December 2016 and staff ramp-up of D&D workers and Radiological Controls Technicians to support increased radiological controls survey requirements and to ensure that the field work team compliments are fully staffed and functional.

Critical Path Schedule

The PFP Critical Schedule Path is a resource driven float path. The 242-Z team finishes up work getting 242-Z decontaminated and ready for demo. That team transitions to work E4 duct, filterbox removals, and 26 inch vacuum removals in the 234-5Z duct level. This gets 234-5Z 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 finally the RADTU & Basement areas. Once complete, the final step is stabilization of the PFP site leading to completion of the final Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*.

Baseline Change Requests

BCR-011C-16-004R0 - *Move PFP CAP 2 Project Schedule Margin into Its Own Control Account*

BCR-011-16-005R0 - *CO #297, PFP Slab Removal Documentation*

BCR-PRC-16-036R0 - *Incorporate FY2016 Fee Adjustment*

BCR-PRC-16-039R0 - *Undistributed Budget Adjustments April 2016*

BCR-PRC-16-040R0 - *Realignment of Management Reserve*

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (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	09/30/16		7/24/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, safety pause associated with a radiological event, and reduction to five field work teams vs. eight, and increased durations to the E4 duct removal efforts caused the Tri-Party Agreement milestone projected completion date to gain 8 calendar days from the forecast date in the March report. This is as a result of identifying efficiencies to work parallel scope in the PRF canyon. 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. However, this Tri-Party Agreement completion is not expected to be met.

SELF-PERFORMED WORK

The Section H.20 clause, entitled “Self-Performed Work,” is addressed in the Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified at this time.

Section B

Spent Nuclear Fuel Stabilization and Disposition (RL-0012)



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

April 2016
CHPRC-2016-04, 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 the Engineered Container Retrieval and Transfer System (ECRTS) Project work by supporting Annex construction In-Basin Construction activities and continued debris dose rating and relocation activities in 105KW Basin. The Operations team worked several monthly and quarterly routines during the period.
- Internal reviews of the draft integrated KW Basin DSA and TSR have started. The new integrated KW Fire Hazard Analysis (FHA) is currently being developed in parallel. Submittal of the safety basis to RL is on schedule for August 2016.
- MPAT of ECRTS production hardware successfully commenced April 5, 2016, at MASF.
- Transportation Safety Authorization for the shipment of the Sludge from 100K Area to T-Plant will be under a One-Time Request for Shipment (OTRS) developed to the requirements of DOE/RL-2001-36, *Hanford Sitewide Transportation Safety Document* (TSD). The cost and schedule impact to the project is currently being evaluated.

EMS OBJECTIVES AND TARGET STATUS

None at this time.

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Dart Injuries	0	0	N/A
Recordable Injuries	0	1	N/A
First Aids	0	14	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

KW Basin Sludge Retrieval Capital Assesst Project

- ECRTS Process Equipment Procurement:
 - o Procurement Set #7: Annex Stack Monitoring System – CHPRC completed evaluations of the proposals provided by the two GS BOA Fabricators.
 - o Procurement Set #8: Sludge Transport and Storage Container (STSC) Vessels – ABW Technologies completed helium leak testing and hydro testing of STSC #2.
 - o Procurement Set #9: SS STSC Assemblies (Instrumentation & Appurtenances) – HiLine personnel completed fabrication of test fixtures for seismic testing of the STSC instrumentation &

appurtenances. HiLine shop personnel completed testing of the Overfill Recovery Tool (ORT) Assemblies 2-24. The Final Data Package for the Sludge Transportation System (STS) Handrails, Spring Gates, and Signage was approved by CHPRC personnel and receipt inspections were completed by AVS.

- o Procurement Set #11: Inert Gas and Auxiliary Ventilation System – Task 1/2: Nitrogen Purge/Supply Panels – CEES personnel completed testing of these panels. CEES personnel completed the final data package for the Purge Panel. Task 3: Cylinder Cradles – The Cylinder Cradles were delivered to MASF.
- o Procurement Set #14: SS Control System Panels – Task 6: Misc. I&C Components – The final data package was approved by CHPRC and the hardware on this task was shipped to MASF.
- MPAT Preparation/Initiation:
 - o Completed process system equipment installation and MPAT successfully commenced April 5, 2016.
 - o Executed test activities through fiscal month consistent with project schedule.
- In Basin Modifications Construction:
 - o Initiated installation of Ingress/Egress assembly at 105 KW Basin.

T Plant Modifications for Sludge Storage Project

- Fabrication/Procurements:
 - o The emergency vent tool design was completed.
 - o Delivery of the Leak Detector Enclosures occurred on April 13, 2016, at the request of CHPRC PTS construction organization to allow the contractor to start mounting the enclosures on racks early.
 - o Leveling frames and containment systems were successfully source inspected by AVS.
 - o Completed incorporating CHPRC and Hanford Fire Department (HFD) RCR comments on the FHA consistent with the Master Documented Safety Analysis (MDSA) Revision 11.
- Construction:
 - o Continued North Load-Out Pit (NLOP) equipment relocation.

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-0012/WBS-012

Explanation of major changes to the project monthly spotlight chart:
 No major changes to the monthly spotlight chart in the month of **April**.

Realized Risks (Risks that are currently impacting project cost/schedule)

STP-123-B: Design Maturity - ECRS Annex/In-Basin Equip.	Finalization of design media for the ECRS equipment installation will result in changes to both cost and schedule. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$912 million, 64 days	●	↔	<p>Risk Event: The project incurred additional cost in April for DCN preparation of Preparation Signage Schedule (DCN-209). Other DCNs identified in the engineering action list are being developed including but not limited to: Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (DCN-068), 105KW Annex Gutter Heat Trace (DCN-409), Radcon related missing design-Add P-10 Gas Lines to Annex (DCN-391), Engineering Change Request (ECR) for CAM installation in Basin (ECR-16-000478), and Shield Cave Mounting (DCN-422), as well changes to I&C Drawing Updates (DCN-405) and 105KW Annex I&C Conduits (DCN-420) that affect I&C routing. The project continues to evaluate the DCN and the impacts to the project.</p> <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>Preparation Signage Schedule (DCN-209)</td> <td rowspan="10" style="text-align: center; vertical-align: middle;">03/16/15</td> <td style="text-align: center;">Jun 2016</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (068)</td> <td style="text-align: center;">In process</td> <td style="text-align: center;">0</td> </tr> <tr> <td>105KW Annex Gutter Heat Trace (DCN-409)</td> <td style="text-align: center;">In process</td> <td style="text-align: center;">95</td> </tr> <tr> <td>Add P-10 Gas Lines to Annex (DCN-391)</td> <td style="text-align: center;">May 2016</td> <td style="text-align: center;">40</td> </tr> <tr> <td>ECR for CAM installation in Basin (ECR-16-000478)</td> <td style="text-align: center;">Jun 2016</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Shield Cave Mounting (DCN-422)</td> <td style="text-align: center;">Jun 2016</td> <td style="text-align: center;">25</td> </tr> <tr> <td>I&C Drawing Updates (DCN - 405)</td> <td style="text-align: center;">Jun 2016</td> <td style="text-align: center;">10</td> </tr> <tr> <td>105KW Annex I&C Conduits (DCN-420)</td> <td style="text-align: center;">Jun 2016</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Sand Filter Shielding Calc. (DCN-413)</td> <td style="text-align: center;">May 2016</td> <td style="text-align: center;">60</td> </tr> </tbody> </table> <p>Recovery Action Assessment: DCNs are identification and reviewed at the weekly engineering meeting to define a path forward for the pending changes. The DCNs identified to-date are expected to be cleared by the end of May 2016 or early June 2016. A Title III manager has been hired to coordinate the design changes with the construction group. The DCN process allows a method of managing the reoccurring risks and their unanticipated impacts. The project continues to identify challenges before they become critical and delay planned work scope. Mitigation actions are in place that are expected to reduce the probability of the risk occurrence and reduces the potential cost and schedule impact. Risk Mitigation Strategy will be changed to Accept. Additionally, 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	%	Preparation Signage Schedule (DCN-209)	03/16/15	Jun 2016	0	Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist (068)	In process	0	105KW Annex Gutter Heat Trace (DCN-409)	In process	95	Add P-10 Gas Lines to Annex (DCN-391)	May 2016	40	ECR for CAM installation in Basin (ECR-16-000478)	Jun 2016	5	Shield Cave Mounting (DCN-422)	Jun 2016	25	I&C Drawing Updates (DCN - 405)	Jun 2016	10	105KW Annex I&C Conduits (DCN-420)	Jun 2016	10	Sand Filter Shielding Calc. (DCN-413)	May 2016	60
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments														
		Month	Trend															
RL-0012/WBS-012																		
STP-123-T: Design Maturity - T-Plant	<p>The final Nitrogen System design is pending FHA update. The construction specification is currently in development. In addition, changes resulting from the PDSA impact the design. There is additional risk with bidder interpretation of the facility ECRs. They do not clearly provide the entire scope of the contractor's work and clarifying bid document details are required.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Likely (>90%)</p> <p>Worst Case Impacts: \$200K, 96 days</p>			<p>Risk Event: The risk is an emerging risk based on constructability reviews of the FMPs. The risk associated with nitrogen purge safety boundary impacts are the additional cost and resources associated with updating the design and providing constructability aids, and conducting material takeoffs.</p> <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>CHPRC has incorporated RL comments and has updated the FHA.</td> <td rowspan="3" style="text-align: center;">03/03/16</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>CHPRC Nuclear safety has drafted a transmittal letter and is waiting on the SWOC FHA and 4 approvals of the MDSA/TSRs before re-submitting</td> <td style="text-align: center;">May 2016</td> <td style="text-align: center;">90</td> </tr> <tr> <td>RL approval of MDSA and FHA</td> <td style="text-align: center;">July 2016</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> <p>Recovery Action Assessment: T-Plant design documents associated with the nitrogen purge system have been issued via ECR-15-000336. The design documents have been given to the contractor for bidding purposes, even though the construction specification, HNF-8764 Revision 2, and ECR-15-000336, states that the installation of the nitrogen bottle rack, bottles, and bottle manifold are on hold, pending RL's approval of the MDSA (Revision 11). All indications, based on discussions with RL, are that Revision 11 of the MDSA will be approved with a nitrogen purge boundary consistent with the design (ECR-15-000336). CHPRC has received comments from RL in a letter (16-NSD-0027_RL) on March 1, requiring revision of the MDSA and the FHA. CHPRC has incorporated RL comments and has updated the FHA. CHPRC Nuclear safety has drafted a transmittal letter and is waiting on the SWOC FHA and four approvals of the MDSA/TSRs before re-submitting them for RL approval on or before May 24, 2016. If the MDSA is not approved as submitted, there is a potential for the design and equipment safety designations to change. If Revision 11 is signed as is, Engineering will remove the hold on the Nitrogen System ECR and specifications. RL review and approval of the MDSA Revision 11 and FHA are needed by July 2016 to support the project schedule. No additional mitigation actions are planned at this time, however, the risk will continue to be monitored.</p>	Risk recovery action(s)	Risk Date	FC Date	%	CHPRC has incorporated RL comments and has updated the FHA.	03/03/16	Complete	100	CHPRC Nuclear safety has drafted a transmittal letter and is waiting on the SWOC FHA and 4 approvals of the MDSA/TSRs before re-submitting	May 2016	90	RL approval of MDSA and FHA	July 2016	0
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RL-0012/WBS-012																											
STP-085-B: Attrition, Acquisition, & Retention of Qualified Professional Staff & Craft Resources - ECRS Annex/In-Basin Equip. Installation	<p>Due to the improving job market and local and complex wide competition for key resources, project delivery will be impacted by the Attrition, Acquisition and Retraining of Qualified Professional Staff. These resources are critical to the timely and cost effective delivery of the work scope.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$940K, 24 days</p>			<p>Risk Event: The project has experienced the loss of key personnel including an HVAC engineer, safety/IH, project work planner, and CM/RM replacement. The CHPRC fire protection vacancy poses an additional support challenge to project.</p> <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>OT will be utilized to maintain work scope until workload is caught up. The Work planner position filled-learning curve for new work planner is aggressive; OT and overlap of management team responsibilities is necessary.</td> <td rowspan="6" style="text-align: center; vertical-align: middle;">02/07/16</td> <td style="text-align: center;">May 2016</td> <td style="text-align: center;">90</td> </tr> <tr> <td>Additional work planner on OT (about 70hrs/mo) to catch up CS packages.</td> <td style="text-align: center;">May 2016</td> <td style="text-align: center;">60</td> </tr> <tr> <td>Resource search is underway to fill HVAC engineer, position. Candidates are being evaluated for the position.</td> <td style="text-align: center;">May 2016</td> <td style="text-align: center;">80</td> </tr> <tr> <td>The safety/IH position has been filled</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>The project CM has been certified as an RM filling the position vacancy for the Annex and In-Basin.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>The project has no control over the CHPRC fire protection vacancies.</td> <td style="text-align: center;">NA</td> <td style="text-align: center;">NA</td> </tr> </tbody> </table> <p>Recovery Action Assessment: The project has hired a work planner, the RM position has been filled internally by the project CM, K-Area Engineering Manager has been interviewing HVAC engineering candidates, and the safety professional position has been filled. The new team members currently are or have recently completed their preliminary training required for their positions. Learning curves are expected to be steep as the individuals become familiar with the new positions.</p> <p>Construction has a current backlog of 8 work-planning packages. The WP is in the process completing his required training and is being brought up to speed on the project as quickly as practical. OT will be required by the WP to catch up on the backlog of planning packages in order to maintain the project schedule. Additionally, a CR was written for old CS packages (16) required to be closed within 30 days of work completion; an additional Ops Planner is working OT only (about 70hrs/month) to catch these packages up to close the CR.</p> <p>This is a reoccurring risk with impacts that cannot be anticipated. The project continues to identify challenges before they become critical and delay planned work scope. Baseline actions are in place to maintain staffing, however, due to the positive job market and competition for labor resources, this risk will continue to be an issue for the 100 area projects. This 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	%	OT will be utilized to maintain work scope until workload is caught up. The Work planner position filled-learning curve for new work planner is aggressive; OT and overlap of management team responsibilities is necessary.	02/07/16	May 2016	90	Additional work planner on OT (about 70hrs/mo) to catch up CS packages.	May 2016	60	Resource search is underway to fill HVAC engineer, position. Candidates are being evaluated for the position.	May 2016	80	The safety/IH position has been filled	Complete	100	The project CM has been certified as an RM filling the position vacancy for the Annex and In-Basin.	Complete	100	The project has no control over the CHPRC fire protection vacancies.	NA	NA
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STP-085-T: Attrition, Acquisition, & Retention of Qualified Professional Staff & Craft Resources – T-Plant	Due to the improving job market and local and complex wide competition for key resources, project delivery will be impacted by the Attrition, Acquisition and Retraining of Qualified Professional Staff. These resources are critical to the timely and cost effective delivery of the work scope. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$940K, 24 days			Risk Event: The project continues to experience the loss of key personnel including a project manager, work planner, and responsible manager. At this time, the potential impacts are difficult to determine and measure. The CHPRC fire protection vacancy and Chemical Engineer/Chemist position have posed an additional support challenge to project.																	
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Recovery Action Assessment: The project has filled the vacant planning position and the planner is being trained and qualified. The planner is being brought up to speed on the project as quickly as practical. OT will be required by the WP to catch up on the backlog of planning packages in order to maintain the project schedule. Due to the project timeline, the Project Manager position will remain vacant. The duties for this position shared by the project staff and other management staff. This is a reoccurring risk with impacts that cannot be anticipated. The project continues to identify challenges before they become critical and delay planned work scope. Baseline actions are in place to maintain staffing, however, due to the positive job market and competition for labor resources, this risk will continue to be an issue for the 100 area projects. This risk will continue to be monitored. No additional mitigation actions have been identified at this time.																					

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																	
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RL-0012/WBS-012																					
STP-093-B: Operational Resources Limitations for Construction Support - ECRTS Annex/In-Basin Equip. Installation	During installation the ECRTS process equipment installation multiple activities, which are currently planned in the FES, compete for the same operational resources (e.g., NCO's, HPT's, Shift Managers, RA, RM, Work Planners). In addition, emergent resource limitations also emerge (e.g., training, sick leave, vacation, short/long term) causing equipment installation delays. Additional resources are needed, which is due to the requirement for increased confidence in release surveys (95 percent versus 67 percent). Internally driven, possibly requiring more RCTs. Risk Handling Strategy: Control Probability: Very Likely (> 90%) Worst Case Impacts: \$1.9 million, 64 days	 		Risk Trigger: Planned Activities compete for the same operational resources, and resource limitations emerge resulting in delays.																	
				<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>The Facility is currently looking at ways to support the new survey requirements to limit the impact work in the basin. In the short term, construction may need to exit the Basin a little earlier to allow for survey of PAPRs and other tools or materials. To compensate for the longer survey time, improvements on entry time into the Basin both in the morning and after lunch and will continue to look for ways to improve our process in order to support construction activities.</td> <td rowspan="2" style="text-align: center;">02/15/2016</td> <td style="text-align: center;">Jul 2016</td> <td style="text-align: center;">50</td> </tr> <tr> <td>OT will be utilized as needed to maintain schedule delays due to emerging risks or schedule short falls. (evaluated weekly)</td> <td style="text-align: center;">Aug 2018</td> <td style="text-align: center;">20</td> </tr> <tr> <td>Evaluate alternative / overlapping shifts.</td> <td></td> <td style="text-align: center;">Aug 2018</td> <td style="text-align: center;">20</td> </tr> </tbody> </table>	Risk recovery action(s)	Risk Date	FC Date	%	The Facility is currently looking at ways to support the new survey requirements to limit the impact work in the basin. In the short term, construction may need to exit the Basin a little earlier to allow for survey of PAPRs and other tools or materials. To compensate for the longer survey time, improvements on entry time into the Basin both in the morning and after lunch and will continue to look for ways to improve our process in order to support construction activities.	02/15/2016	Jul 2016	50	OT will be utilized as needed to maintain schedule delays due to emerging risks or schedule short falls. (evaluated weekly)	Aug 2018	20	Evaluate alternative / overlapping shifts.		Aug 2018	20		
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Recovery Action Assessment: Additional operators have been hired or alternate resources have been identified. New staff acquisitions have been trained and process are in place to train new staff as needed. Evaluation of alternative/overlapping shifts will be evaluated if schedule recovery actions are required to hold or recover schedule. The constructability review process will continue as needed. This is a reoccurring risk with impacts that cannot be anticipated. The project continues to identify challenges before they become critical and delay planned work scope. Mitigation actions are being put in place to reduce the probability of the risk occurrence. Additionally, the risk will continue to be monitored. No additional mitigation actions have been identified at this time.																					

Risk Title	Unmitigated Risk Impacts	Assessment		Comments														
		Month	Trend															
RL-0012/WBS-012																		
STP-093-T: Operational Resources Limitations for Construction Support - T-Plant Modifications	<p>During installation the T-Plant modifications and equipment installation activities, which are currently planned in the FES, compete for the same operational resources (e.g., NCO's, HPT's, Shift Managers, RA, RM, Work Planners). In addition, emergent resource limitations also emerge (e.g., training, sick leave, vacation, short/long term) causing equipment installation delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Very Likely (> 90%)</p> <p>Worst Case Impacts: \$512K, 32 days</p>	●	↔	<p>Risk Event: The project incurred additional cost and schedule delays resulting from availability of RCTs who needed to complete routine surveys before assisting construction activities; IH having to update calibration of equipment; and the need for Facility support to complete TSR work activities before construction work activities could commence. Overall, since the beginning of April there has been 200 hours of lost time. On average, less than 2-hours of Canyon work per day has been worked through the month of April. Much of the recent, T-Plant NLOP removal lost time noted in the DAR's is attributed to Operations Resource Support resource challenges associated with HPT's, NCO's and at times Process Crane Operator.</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>The construction crews waited for available support staff to complete their various duties.</td> <td rowspan="2" style="text-align: center;">04/15/16</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>OT will be utilized as needed to maintain schedule delays due to emerging risks or schedule short falls. (It is assumed that Operations will provide their share of OT support.)</td> <td style="text-align: center;">Jan 2017</td> <td style="text-align: center;">20</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Additional operational resources have been hired at T-Plant to support the construction work. The Construction team has hired an additional planner to support work package development, enhanced work planning, and Hazard Review Board presentations. FPE resources have not engaged to fully support NLOP equipment removal planning process. The apparent resource challenges continue due to limited FPE resources and competing priorities causing potential delays in preparation for equipment removal. This is a reoccurring risk with impacts that cannot be anticipated. The project continues to identify challenges before they become critical and delay planned work scope. Mitigation actions are being put in place to reduce the probability of the risk occurrence and reduces the potential cost and schedule impact. Additionally, 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	%	The construction crews waited for available support staff to complete their various duties.	04/15/16	Complete	100	OT will be utilized as needed to maintain schedule delays due to emerging risks or schedule short falls. (It is assumed that Operations will provide their share of OT support.)	Jan 2017	20			
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STP-108-B: STP Annex Equipment and ECRTS System Reliability	<p>Required preventive and corrective maintenance on the STP Annex and the ECRTS equipment during the construction period is higher than planned due to one-of-a-kind system design or sludge characteristics, resulting in cost and schedule impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%)</p> <p>Worst Case Impacts: \$520K, 66 days (unmitigated worst case)</p>	●	↔	<p>Risk Event: The project has incurred additional cost and scope due to the underestimation of the CM and PM scope associated with preventive maintenance frequencies and rate updates. The project has also incurred cost associated with the unplanned corrective maintenance for the crane.</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>MR is being requested to address the coming need for additional scope associated with CM\PM costs for FY17 and FY18.</td> <td rowspan="3" style="text-align: center;">04/15/16</td> <td style="text-align: center;">May 2016</td> <td style="text-align: center;">80</td> </tr> <tr> <td>Crane maintenance is not considered critical and will be addressed, as funds are made available.</td> <td style="text-align: center;">Aug 2018</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PM rates will be addressed as deemed appropriate</td> <td style="text-align: center;">Aug 2018</td> <td style="text-align: center;">10</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Corrective maintenance is intended to respond to unanticipated equipment and system issues. Although an effort is made to identify potential problems, there are always Black Swans (unknown/unknown) issues that occur with facility systems. The project continues to identify challenges before they become critical and delay planned work scope. Mitigation actions are in place that are expected to reduce the probability of the risk occurrence and reduces the potential cost and schedule impact. Additionally, 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	%	MR is being requested to address the coming need for additional scope associated with CM\PM costs for FY17 and FY18.	04/15/16	May 2016	80	Crane maintenance is not considered critical and will be addressed, as funds are made available.	Aug 2018	0	PM rates will be addressed as deemed appropriate	Aug 2018	10
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MR is being requested to address the coming need for additional scope associated with CM\PM costs for FY17 and FY18.	04/15/16	May 2016	80															
Crane maintenance is not considered critical and will be addressed, as funds are made available.		Aug 2018	0															
PM rates will be addressed as deemed appropriate		Aug 2018	10															

Risk Title	Unmitigated Risk Impacts	Assessment		Comments											
		Month	Trend												
RL-0012/WBS-012															
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.	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>Risk Event: This is an emerging 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 a One-Time Request for Shipment (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>CHPRC will brief the new RL Transportation Safety manager on the current planning strategies and seek concurrence.</td> <td rowspan="2">04/15/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Update schedule baseline to reflect agreed upon strategy moving forward.</td> <td>June 2016</td> <td>30</td> </tr> </tbody> </table> <p>Recovery Action Assessment: CHPRC is currently working to produce an undated schedule and cost profile to accommodate the new transportation strategy. Once the cost and schedule impact is established, the project will seek MR.</p>	Risk recovery action(s)	Risk Date	FC Date	%	CHPRC will brief the new RL Transportation Safety manager on the current planning strategies and seek concurrence.	04/15/16	Complete	100	Update schedule baseline to reflect agreed upon strategy moving forward.	June 2016	30
Risk recovery action(s)	Risk Date	FC Date	%												
CHPRC will brief the new RL Transportation Safety manager on the current planning strategies and seek concurrence.	04/15/16	Complete	100												
Update schedule baseline to reflect agreed upon strategy moving forward.		June 2016	30												
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)															
FY2016 Risk Triggers (Risk could be realized in FY2016)															
No critical risks identified in the month of April.															
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)															
FY2016 Risk Triggers (Risk could be realized in FY2016)															
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 impact downstream testing, construction, readiness and ECRTS Operations. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$500K, 60 days			<p>Risk Trigger: 1) 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>Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of April. While there have been a substantial number of Test Deficiency Reports (>50) associated with equipment operating anomalies and a number of design changes to existing configuration, the technical staff has been successful to date in addressing the challenges without impacting MPAT test duration or cost. The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified. No alternative course of actions necessary at this time.</p>	Mitigation action(s)	FC Date	%	Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.	Ongoing	N/A					
Mitigation action(s)	FC Date	%													
Ensure all project technical personnel are available to mitigate emergent technical challenges and establish proactive solutions.	Ongoing	N/A													
FY2018 Risk Triggers (Risk could be realized in FY2018)															
STP-018-O: STP Operational Upset or Spill - During 1st STSC	An operational upset or spill results in a work shutdown at K Basins, resulting in schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$1.3 million, 96 days			<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 April. 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													

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0012/WBS-012										
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%)</p> <p>Worst Case Impacts: \$0K, 8 days</p> <p>*Cost increase will result in cost per day impacts from crews, and hotel load.</p>	●	↔	<p>Risk Trigger:</p> <p>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" style="width: 100%; border-collapse: collapse;"> <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:</p> <p>No changes in the month of April. 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 risks/opportunities)										
CHPRC proposed five risks 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 is evaluating the impacts to the overall risk analysis.										

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	5.7	6.0	3.9	0.2	4.2%	2.1	35.2%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$0.2M/+4.2%)

The variance is within reporting thresholds.

CM Cost Performance (+\$2.1M/+35.2%)

Underrun is primarily due to an accrual adjustment made in the current month for costs on the Annex Construction contract, which were accrued and paid in prior months (March costs were overstated). In addition, the adjustment for the transfer of Project Management from OPC to TEC has respreads budget for this Level of Effort (LOE) account over the latter half of the Fiscal Year rather than the full year.

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	567.1	568.7	568.0	1.7	0.3%	0.7	0.1%	720.2	717.6	2.6

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$1.7M/+0.3%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$0.7M/+0.1%)

The variance is within reporting thresholds.

Variance at Completion (+\$2.6M/+0.4%)

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		
	Projected Funding	Spending Forecast	Spend Variance
Expense - Spending Forecast	53.0	46.0	6.9
Incremental Scope Pending Change Management	0.0	0.3	(0.3)
Expense - Subtotal	53.0	46.3	6.7
Line Item	68.1	36.1	32.0
Incremental Scope Pending Change Management	0.0	0.3	(0.3)
LI -Subtotal	68.1	36.4	31.7
RL-0012 – Total	121.1	82.7	38.4

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

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

Critical Path Schedule

The critical path flows through the installation of process equipment at MASF, performance of the MPAT at MASF, installation of process equipment at 100K Basin, Pre-operational acceptance testing of the facility modifications and annex 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 Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin* (milestone is outside contract period in FY2019).

Baseline Change Requests

BCR-012-16-013R0, *Incorporate CO #300 100-KW Garnet Filter Media Remediation*

BCR-012-16-014R0, *Move T Plant Sludge Storage Fabrication to GPP WBS*

BCR-012-16-017R0, *RL-012 OA Project Impacts from RL-012 CAP Schedule Margin Logic Change*

BCR-PRC-16-039R0, *Undistributed Budget Adjustments April 2016*

BCR-012C-16-016R0, *Establish CAP 15-D-401 Sludge Retrieval Project Management Reserve Values*

BCR-PRC-16-036R0, *Incorporate FY2016 Fee Adjustment*

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (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.	09/30/2018		08/27/2018	The forecast date includes schedule margin from the Project's risk analysis.
M-016-177	Complete installation of sludge transfer equipment in K West Reactor facilities	9/30/2017		08/27/2018	

SELF-PERFORMED WORK

The Section H.20 clause, entitled "Self-Performed Work," is addressed in the Overview.

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)

April 2016
CHPRC-2016-04, 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. Overall, the project is delivering planned efficiencies, but continues to be impacted by emerging work and realized risks. The WESF Stabilization and Ventilation Project (W-130) completed installation of north pool cell door security cage, containment tent for use as step off pad, and new electrical control panel for K3N ventilation system. In addition, the project excavated and placed bollards around K3N foundation pad and fire suppression fill pipe. Received two Navy reactor compartments in Trench 94.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
16-EMS-WFM-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-WFM-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	40%
16-EMS-WFM-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	35%

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	2*	N/A *1 Recordable case, PTS in support of RL-0013.
First Aid Cases	2	24*	<ul style="list-style-type: none"> 4/27/16 – Employee struck forearm on bracket. (23993) 4/28/16 – Wind blew debris into employee's eye. (23996) *8 First Aid Cases, PTS in support of RL-0013.
Near Misses	0	1	N/A

KEY ACCOMPLISHMENTS

13.01 Project Management

- o Submitted WESF Closure Plan and Part A Permit Modification formal comments to Ecology.

13.02 Capsule Storage & Disposition

- o Performed/Completed:
 - Conducted multiple canyon entries for relamping of canyon and general maintenance.
 - 34 Preventive Maintenance (PM) work packages.

a. Capsule Extended Storage Project:

- Prospective bidder question responses are being drafted and will be posted by April 26. The proposal due date is May 23, 2016.

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

- o Performed/Completed:
 - Installation of north pool cell door security cage.
 - Installation of containment tent for use as step off pad.
 - Excavated and placed bollards around K3N foundation pad and fire suppression fill pipe.
 - Installed new electrical control panel for K3N ventilation system.
 - Completed fabrication of condensate drain line and vent line to TK-100. Completed pressure testing of condensate drain line.

13.03 Canister Storage Building (CSB)

- o Performed/Completed:
 - Painting interim storage area (ISA) pad Container Restraint System (CRS) floor.
 - 17 PM packages.

13.06 TRU Repackaging

- o Transuranic mixed (TRUM) waste completed and returned fiscal year to date – 290.3 m3.
- o M-91 Alternative Study:
 - Continued to assemble Engineering Alternatives study.
- o Shipments Received:
 - Two waste drums and eight waste boxes from PFNW into Mixed Waste Trench (MWT) 31 in three shipments.

13.07 WRAP

- o Surveillances/PMs:
 - 114 Surveillances.
 - 9 PM packages.

13.08 T Plant

- o Removed/replaced cover blocks from canyon cells 15L.
- o Qualified second Process Crane Operator (PCO).
- o Surveillances/PMs:
 - 475 Surveillances.
 - 26 PM packages.

13.09 CWC and Low Level Burial Grounds (LLBG)

- o Performed/Completed:
 - Crane demobilization from Trench 94.
 - 2403-WA lighting upgrades (84 fixtures).
 - Continued with floor repairs in CWC 2402-WE waste storage building and with 2402-WB.
- o Surveillances/PMs:
 - 29 PM packages.
 - 311 Surveillances.
- o Shipments Received:
 - Seven Standard Waste Boxes (SWB) received into CWC in two shipments.

13.11 Liquid Effluent Facilities

- o ERDF Transfer Pipeline Construction:
 - Performed/Completed:
 - 200 West Pump and Treat tie-in for mechanical and electrical.
 - Bermed area.

13.12 Integrated Disposal Facility

- o Completed monthly inspections.

13.14 Solid Waste Base Operations

- o Environmental Enhancement:
 - Automated RCRA Inspection sheets at CWC:
 - Approved software Management Plan.
 - Initiated software development.

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 Shipments Received:
 - Navy Reactor (PSNS-068-1) Coolant Pump into MWT-34.
- o Completed:
 - 147 Surveillances.

Work for Others:

- o Navy Reactor Compartments:
 - Received two reactor compartments.

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). Additional repackaging scope was incorporated into the contract and performance measurement baseline in October 2015. However, regulator interest continues regarding container condition and CHPRC is monitoring evolving requirements along with RL.

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 WDOH were notified of the situation. Options to rectify the situation were evaluated. WDOH prefers an engineering evaluation by Pacific Northwest National Laboratory (PNNL) to justify use of the higher flow rates. This will also provide defensibility for past data. Following successful completion of

the engineering evaluation, RL will submit a NOC revision to modify the license to reflect the wider range of stack flow rates.

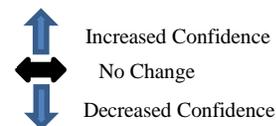
Status:

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. The first deliverable was received September 28, 2015; the preliminary review is complete. PNNL supplied preliminary information providing a basis for an expanded flow range. A meeting with RL and WDOH was held October 8, 2015 to present the first deliverable from PNNL. Following the meeting, PNNL cleared the presentation for release, and the cleared copies were provided to WDOH on October 22, 2015. WDOH provided positive feedback on the PNNL presentation; but wants one of six original tests to be re-performed but 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. Fuels Facility Work Control is in the process of developing a work package for the additional field testing, with support from Engineering and Environmental Management.

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 April .																					
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			<p>Risk Event: In November 2011, degraded containers were discovered in CWC.</p> <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> <p>Recovery Action Assessment: Project continued to perform container surveillances in the month of April to identify container and container cover abnormalities. Overpack of 25 drum waste packages are scheduled to begin July 5, 2016 and complete prior to September 30, 2016. All shipments related to the 280 m3, largely from Outside Storage Area A, to Perma-Fix Northwest are complete and returned to CWC/LLBG. A contract was awarded for the design and fabrication of a large overpack for Storage box 75DMA16F3 with a subsequent move into 2403WD. The project will perform the overpack of the storage box once resources become available.</p> <p>A potential impact may be realized due to regulator uncertainties related to the definition of a satisfactory container when corrosion is evident. These uncertainties may result in the inability to efficiently receive waste from on-site generators, i.e., PFP. At this time impacts are being realized in two buildings for the receipt of PFP CERCLA waste. A teleconference with the EPA was held and no final determination was made by the regulators on the definition of a "good drum." CHPRC is in possession of a letter from the EPA that states they do not believe CHPRC understands what a "bad drum" is. No meetings are currently scheduled to resolve this concern, however a letter is being drafted to request contract direction from RL. At this time it is undetermined on the timeframe to reach a conclusion.</p>	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
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																		
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Process waste packages at a rate funded by RL.		On-Going	N/A																		

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
WSD-W130-07: WESF W-130 Class 3 Permit modifications – Ecology	<p>Significant comments or rejection from Ecology on the Class 3 permit modification and closure plan are issued, resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 144 days</p> <p>*Cost increase will result in cost per day impacts from crews, and hotel load.</p>			<p>Risk Event: Risk was realized upon receipt of letter of incompleteness from Ecology on closure plan and Class III permit modifications.</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>Obtain Temporary Authorization (TA) from Ecology to allow construction activities to proceed without full permit approval</td> <td style="text-align: center;">03/25/15</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Obtain second TA from Ecology to allow grouting activities to proceed without full permit approval.</td> <td></td> <td style="text-align: center;">5/23/16</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> <p>Recovery Action Assessment: CHPRC and RL met with Ecology on February 9, 2016 to discuss a phased approach instead of 1 TA for the full scope requested. The first TA would allow core drilling; the second TA would allow grouting. Ecology has put the closure plan out for public comment (March 14 – April 27, 2016). A TA for core drilling was received from Ecology effective March 31 – September 27, 2016. The TA specifically excludes grouting activities. A second TA to allow grouting has been requested by May 23, 2016 to avoid schedule impacts. The forecasted completion date for the second TA approval was updated to reflect the accurate completion date. This phased dual TA approach poses additional schedule risk if Ecology does not issue the second TA in time to support field work, and may prolong an interim condition where core drills have been made but grout not placed. Additional resources will continue to be necessary to work permitting issues until final permit is issued and implemented. CHPRC and RL submitted public comments on the draft permit and closure plan because some language had been changed after certification by RL and CHPRC. RL, CHPRC, and Ecology are still in discussions to resolve. Indications are that second TA for grouting will not be received by request date. Additional cost for labor resources is incorporated into CP269 R2 through April 2016. It is not known when the plan will be incorporated into the baseline as it is dependent upon RL approving and definitizing the change proposal. No additional alternative course of actions needed at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Obtain Temporary Authorization (TA) from Ecology to allow construction activities to proceed without full permit approval	03/25/15	Complete	100	Obtain second TA from Ecology to allow grouting activities to proceed without full permit approval.		5/23/16	0
Risk recovery action(s)	Risk Date	FC Date	%													
Obtain Temporary Authorization (TA) from Ecology to allow construction activities to proceed without full permit approval	03/25/15	Complete	100													
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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	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. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$550K, 112 days			<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: 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.</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>Complete fabrication and installation of new fire suppression system</td> <td rowspan="5" style="text-align: center;">02/01/16</td> <td>TBD</td> <td>TBD</td> </tr> <tr> <td>Complete K3N skid modifications</td> <td>4/29/16</td> <td>90</td> </tr> <tr> <td>Perform electrical investigations in service gallery</td> <td>7/11/16</td> <td>53</td> </tr> <tr> <td>Perform hot pipe trench investigative core drilling</td> <td>5/30/16</td> <td>0</td> </tr> <tr> <td>Install spool piece in place of dampers to allow testing to progress</td> <td>5/27/16</td> <td>0</td> </tr> </tbody> </table> <p>Recovery Action Assessment: A revised design has been provided for the fire suppression system changes that will allow for pressure testing of the full system. The revised design resulted in a 10 foot expansion of the K3N skid foundation pad to allow for the extra spool piece required for insertion of the sprinkler head in the ducting upstream of the filters. The contractor will provide the spool piece and the sprinkler after delivery of the skid to WESF for installation. The design and modifications to the K3N skid have been completed. Work to perform electrical investigations in the service gallery commenced in April and is in progress. A work package to perform a small one inch core into the hot pipe trench is in planning. The work package will allow insertion of a borescope and temperature probe to determine if open communication exists between the two facilities. Results of investigation core drilling will be used to plan appropriate risk mitigations to prevent grout intrusion into B Plant.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Complete fabrication and installation of new fire suppression system	02/01/16	TBD	TBD	Complete K3N skid modifications	4/29/16	90	Perform electrical investigations in service gallery	7/11/16	53	Perform hot pipe trench investigative core drilling	5/30/16	0	Install spool piece in place of dampers to allow testing to progress	5/27/16	0
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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	<p>MLLW & TRU treatment capacity/capability does not meet Hanford needs or treatment does not occur as scheduled, resulting in cost impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Low (<10%)</p> <p>Worst Case Impacts: \$10 million, 0 day</p>	●	↔	<p>Risk Trigger Metric: Will continue throughout contract (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Leverage capability at PFNW to utilize their Low-Level Facility (LLF) for the receipt and processing of non-mixed TRU waste from CWC and PFP. The LLF has a separate radioactive material license (RML) from their Mixed Waste Facility (MWF); therefore, allowing additional quantities of NRC defined special nuclear material (SNM) to be received.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Established multiple treatment contracts for the processing of MLLW and TRU with terms extending to the end of the current CHPRC contract with RL (i.e., September 30, 2018).</td> <td>On-Going</td> <td>N/A</td> </tr> <tr> <td>Continue to work with RL to fund the processing of TRU waste at PFNW at a rate in which keeps them viable (i.e., keeps the doors open).</td> <td>On-Going</td> <td>N/A</td> </tr> <tr> <td>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 TRUM waste quantities to be received and processed at their MWF.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: The TRUM waste being generated from RL-0011 PRF Canyon floor cleanout could affect the projects ability to have sufficient treatment capability/capability for the processing of Legacy TRUM waste to meet M-091-47 objectives for FY2017 and FY2018. PFP has identified at least one shipment of non-mixed TRU gloveboxes that will be shipped to PFNW for processing towards the end of May, however it will not impact TRUM waste processing at PFNW. PFNW has identified and prepared one of their buildings for processing of non-mixed TRU waste, however they are holding any further readiness until CHPRC can more specifically identify when the oversized non-mixed TRU waste components from PFP will begin to be shipped.</p> <p>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 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, it will still load up PFNW with respect to their Pu limits for several years which will significantly limit the shipment of other Pu containing waste (i.e., legacy large container TRU/M waste) to PFNW for processing.</p>	Mitigation action(s)	FC Date	%	Leverage capability at PFNW to utilize their Low-Level Facility (LLF) for the receipt and processing of non-mixed TRU waste from CWC and PFP. The LLF has a separate radioactive material license (RML) from their Mixed Waste Facility (MWF); therefore, allowing additional quantities of NRC defined special nuclear material (SNM) to be received.	Complete	100	Established multiple treatment contracts 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 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 TRUM waste quantities to be received and processed at their MWF.	On-Going	N/A
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High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
Lifecycle Risk Triggers (Risk could be realized at any point of the project)																			
WSD-097: Major Equipment Failure - T-Plant	<p>T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts, and schedule delays.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%)</p> <p>Worst Case Impacts: \$2 million, 33 days</p>	●	↔	<p>Risk Trigger Metric: During planned S&M activities a suspect system component is discovered that requires attention, or an unexpected malfunction results in this risk from 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 April. 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																	

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0013/WBS-013													
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 S&M activities a suspect system component is discovered that requires attention, or an unexpected malfunction results in this risk from 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 April. 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 April. The project is continuing implementation of planned efficiencies (approximately \$50 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>9/30/16</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>9/30/16</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No change in the month of April. Structural evaluations and calculations have been completed and identified controls necessary during grouting (limit lifts of grout placement to 3 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.	9/30/16	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.	9/30/16	0
Mitigation action(s)	FC Date	%											
Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.	9/30/16	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.	9/30/16	0											
Unassigned Risks (Pending ownership of identified risks/opportunities)													
No unassigned risks identified in the month of April.													

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	7.8	8.2	7.7	0.5	6.1%	0.5	6.3%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$0.5M/+6.1%)

The current month schedule variance is within threshold.

CM Cost Performance (+\$0.5M/+6.3%)

The current month favorable cost variance is due to down-posting burial ground 3AE on less than planned resources (no contamination found during survey).

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	1,045.7	1,045.0	979.4	(0.7)	-0.1%	65.6	6.3%	1,333.1	1,260.6	72.6

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (-\$0.7M/-0.1%)

The schedule variance is within threshold.

CTD Cost Performance (+\$65.6M/+6.3%)

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

Variance at Completion (+\$72.6M/+5.4%)

The Variance at Completion is due to continued implementation of planned efficiencies.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
Spending Forecast	106.6	92.1	14.5
Incremental Scope Pending Change Management	0.0	12.3	(12.3)
RL-0013 – Total	106.6	104.4	2.2

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

FY2016 project funding for RL-0013 remained the same. The FYSF was increased from \$103.5 million to \$104.4 million due to adjusting remaining fiscal year resources to match current monthly trends in facility base operations.

Critical Path Schedule

Critical path analysis can be provided upon request.

Baseline Change Requests

BCR-013-16-020R0, *Definitization of CO #279, SWITS Bar Code Reader*
 BCR-013-16-021R0, *Definitization of CO #276, Additional WESF Occupancy*
 BCR-PRC-16-039R0, *Undistributed Budget Adjustments April 2016*
 BCR-PRC-16-040R0, *Realignment of Management Reserve*

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (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-026-01Z	Submit Hanford Land Disposal Restrictions Summary Report	4/30/16	4/14/16		Completed
M-091-03J	Submit Revision of TRUM Waste and MLLW PMP to Ecology.	6/30/16		6/30/16	On Schedule
M-091-47B	Certify or treat 280 cubic meters of TRUM/MLLW waste in FY2016. Submit a change request to establish the next two interim milestones for annual certification of TRUM waste and disposal of MLLW.	9/30/16		9/30/16	On Schedule
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 and EPA.	3/31/17		3/31/17	On Schedule

SELF-PERFORMED WORK

The Section H.20 clause, entitled “Self-Performed Work,” is addressed in the Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
CONTRACT			
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.	Ongoing (pending restart of WIPP Shipments)

Section D

Soil and Groundwater Remediation Project (RL-0030)



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

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

April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Pump and Treat (P&T) Operations continued making progress on the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial process documentation for the River Corridor and Central Plateau. Groundwater treatment and well drilling completed in April 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	28.3	229.4	4.7	43.0								
HX P&T	25.7	141.8	2.2	14.8								
KR-4 P&T	14.4	94.7	0.4	2.0								
KW P&T	14.0	99.9	0.6	5.3								
KX P&T	36.6	251.8	2.2	15.4								
200 West P&T	43.4	522.7	2.4	41.0	91	1227	4073	50425	.20x10 ¹²	1.8x10 ¹²	2.0	15
Combined	162.5	1340.2	12.4	121.5	91	1227	4073	50425	.20x10¹²	1.8x10¹²	2.0	15

Well Drilling by Area	FY2016 Planned	Current Month	FY2016 Cumulative
100-KR-4	3	-	-
100-HR-3	8	-	-
200-UP-1	7	1	1
200-UP-1 Chromium Plume	3	-	-
200-ZP-1 C9521	1	-	-
200-ZP-1 monitoring	2	-	2
M-24 Milestone 100-NR-2	6	-	-
M-24 Milestone C Farm	1	-	1
Vadose Zone	1	-	1
100-F I/U	8	-	-
Total Wells	40	1	5
Site Wide Boreholes	25	1	10

EMS Objectives and Target Status

Objective	Target	Actions	Due Date	Status	Overall Target 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.	Compile 1 st quarter emissions evaluation.	12/31/15	100%	50%
		Compile 2 nd quarter emissions evaluation.	3/31/16	100%	
		Compile 3 rd quarter emissions evaluation.	6/30/16	33%	
		Compile 4 th quarter emissions evaluation and complete work site assessment on FY2016 emissions.	9/30/16	0%	
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	50%	50%
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	25%	25%
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	20%	20%

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	3	N/A
First Aid Cases	4	*50	<ul style="list-style-type: none"> • 4/6/2016 - Employee was removing a cassette using a pry bar to adjust lifting bails. The pry bar slipped causing the employee to catch body shifted onto left leg. Employee taken to HPMC for evaluation, examined, and released without restrictions. (23975) • 4/7/2016 - The employee donned cut resistant gloves in preparation of performing a radiation smear on the underside of an ERDF container. The gloves were tight and as the employee flexed their hands to stretch the gloves, felt a twinge in the left hand. When employee reached under the container to complete the smear, the twinge continued but resolved after completion of the smear. Employee reported the incident to supervisor and was taken to on-site HPMC for evaluation. No treatment was provided and employee returned to work without restrictions. (23973) • 4/11/2016 - While exiting a sample van the employee missed the last step and landed on their feet on the ground outside the van. The NCO was transported to 200W HPMC for evaluation and was released without restrictions. (23977) • 4/11/2016 - As the employee exited the second set of doors at MO278, the door contacted their forehead causing a contusion. Employee reported the incident to their manager and was taken to on-site HPMC and treated with over-the-counter medication and an ice pack. Employee was released to return to work without restrictions. (23976) <p>*12 FA cases, PTS in support of RL-0030.</p>
Near-Misses	1	3	<ul style="list-style-type: none"> • 4/22/16 - Two riggers working at the 200W P&T were placing the last cassette lid on the MBR B. One of the riggers reported a tingle through their hands. The employee was wearing leather gloves that were wet from water associated with the activity. The employee mentioned the tingling to their co-worker, another rigger, who stated they had a similar tingling sensation earlier in the day while performing similar work. This event represents a personnel near miss due to the level of unexpected electrical hazardous energy.

KEY ACCOMPLISHMENTS

RL-0030.O1 RL 30 Operations RL 30 Integration & Assessments

Risk & Modeling Integration

- Conducted RL sponsored Hanford Geology Field Trip on April 12, 2016. Introduced new scientists and geotechnical staff to outcrop equivalents of our subsurface hydrogeological stratigraphy to familiarize and improve understanding of our subsurface hydrogeology interpretations. Eighteen people participated, including staff from RL, CH corporate, CHPRC and Intera.

RL-0030.O1 RL 30 Operations River Corridor

100-BC-5 Operable Unit

- Presented feasibility study alternatives and comparison of alternatives to RL and Environmental Protection Agency (EPA) on April 7, 2016.
- Completed comment resolution and initiated preparation of the Draft A RI/FS report.

100-FR-3 Operable Unit

- Completed installation of 12 automated water level monitoring (AWLN) units at existing wells. All units have been functionally tested and are transmitting data.

100-HR-3 Operable Unit

- Completed comment resolution of the Interim RD/RAWP, O&M and Sampling Analysis Plan (SAP) plans with Ecology.

100-KR-4 Operable Unit

- Submitted the draft KW Rebound Study Plan to RL for review on April 15, 2016.

100-NR-2 Operable Unit

- Provided the Draft Rev. 2 Interim Action RD/RAWP and SAP for final RL and Ecology review.
- Completed construction of access roads and well pads required for the installation of six new monitoring wells in April.

Central Plateau

200-UP-1 Operable Unit

- Completed drilling three of seven groundwater monitoring wells.
- Completed the Rev. 0 Waste Management Plan for the 200-UP-1 Groundwater Operable Unit.
- Responded to EPA comments on the 200-UP-1 drilling SAP.

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

- Completed the Rev. 0 200-BP-5 EE/CA and initiated the public review process for the proposed groundwater removal action.
- Submitted the Draft A 200-BP-5 Treatability Test Report to RL for transmittal to Ecology for review.
- Completed the design of the 200-BP-5 pipeline extension and initiated the procurement of construction materials.

200-IS-1 Operable Unit

- Completed all 310 waste unit scoping summaries through RL review and updates; preparing for Atlas publication.

- Conducted initial evaluation workshops for the RI/FS Work Plan with RL and Ecology on April 12 and 26, 2016.

200-SW-2 Operable Unit

- Closed the remaining ten Central Plateau Principle and Parameter-related comments on March 31, 2016, noting that Ecology stated they plan to dispute comment #32 related to ProUCL calculation methodology. Conducted work plan text revision comment resolution meeting on April 7, 2016, focusing on the six remaining comments. Proceeding with Rev. 0 RI/FS work plan preparation.
- Completed CHPRC consistency/integration review of 200-DV-1, 200-SW-2, and 200-WA-1. Updating the RI/FS work plan based this review.

200-EA-1 Operable Unit

- Awarded subcontract and initiated scoping summary development on the initial eight waste units with the focus on determining critical content.
- Supported discussions with RL-0040 regarding upcoming Tier 2 Building/Structure removal actions anticipated for FY2017; focusing on initiating integration related to potential waste left in place (slab on grade, soil contamination) following removal action completion.

200-CW-5 and 200-PW-1/3/6 Operable Unit

- Incorporated EPA comments into the RD/RAWP and SAP and initiated document clearance.

200-PW-1 Operable Unit

- Resolved and incorporated EPA comments on the Draft Rev. 0 200-PW-1 Soil Vapor Extraction (SVE) Response Action Report and the document is in the process of being released to EPA for final review and approval.

200-DV-1 Operable Unit

- Closed the remaining ten Central Plateau Principle and Parameters-related comments and initiated preparation.
- Completed initial Becker-Hammer drilling of three additional characterization boreholes. Casings have successfully been installed from surface to below the high radiological interval in all 22 boreholes. Seven of the 22 borehole locations have completed sonic drilling. The drilling of borehole C9507 (219-T-19) is underway.
- Completed decommissioning two BY Crib boreholes (C9550 and C9552), including installation of a flush mount surface vault.
- Completed installation of sensor arrays in four BY Crib boreholes to support future electrical conductivity geophysical surveys and to facilitate a more thorough interrogation of the extent of the vadose zone contamination.

Groundwater P&T Facilities

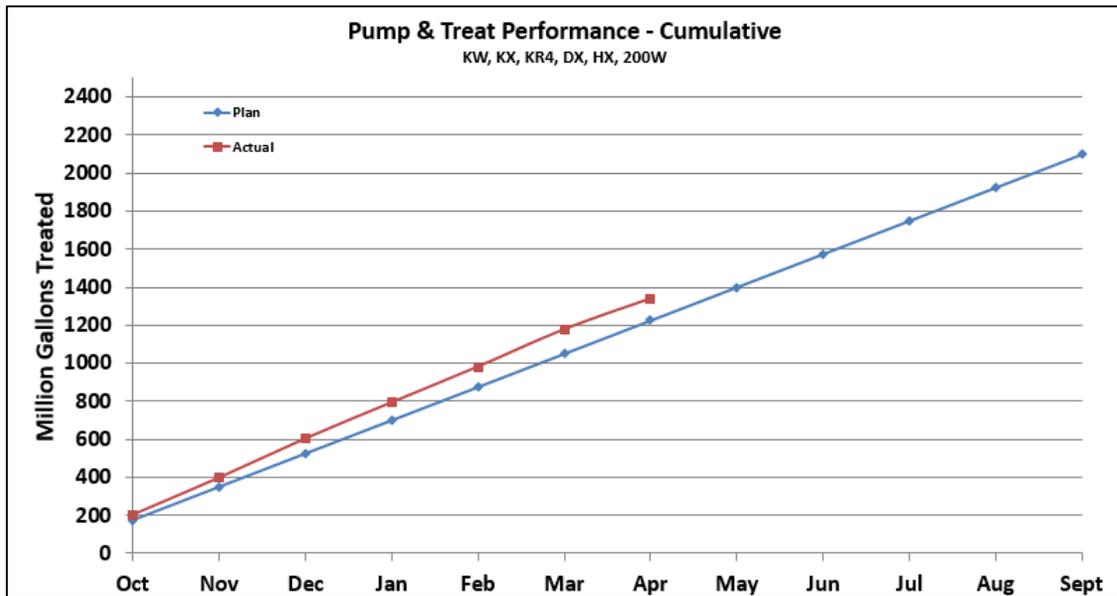
200 West P&T

- Operated the 200 West P&T at an average of 1,005 gpm. Lower flow volumes have been experienced because Fluid Bed Reactor (FBR) A is offline for leak repairs.
- Initiated MBR Cassette installation.

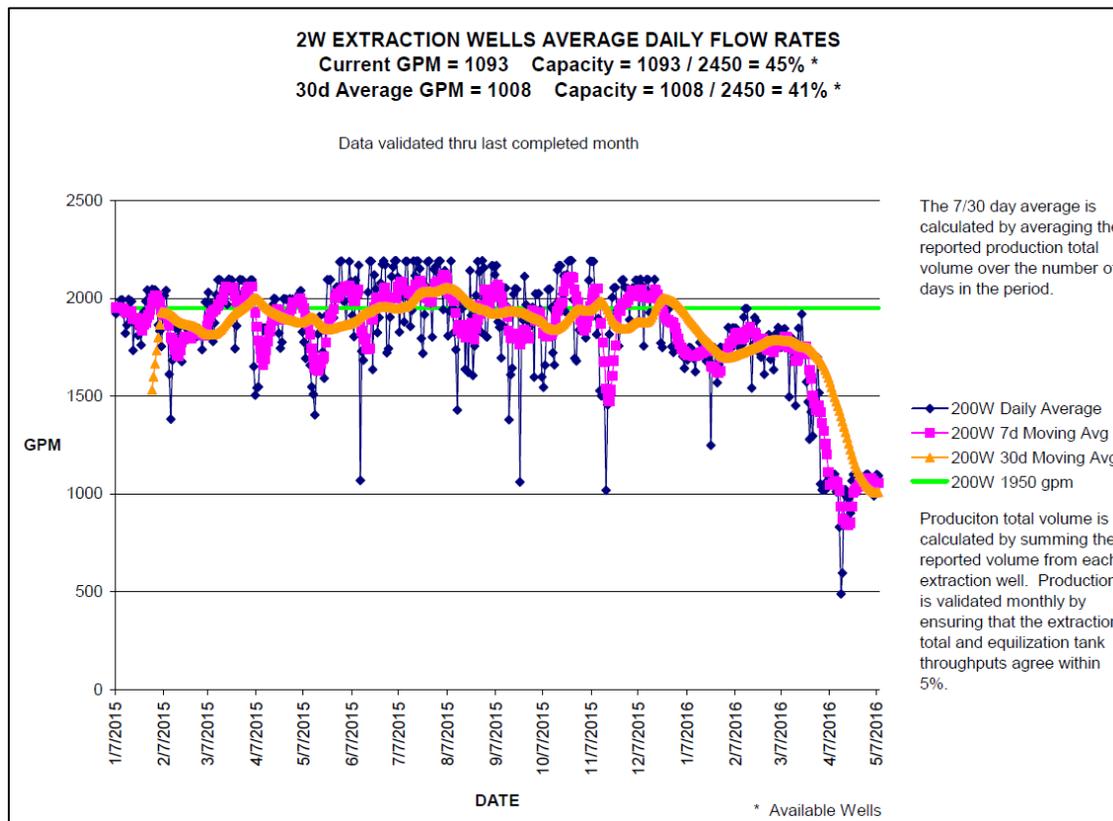
100 Area P&Ts

- Operated the DX P&T at 655 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 334 gpm, above the facility capacity of 330 gpm.
- Operated the KW P&T at 325 gpm, near the facility capacity of 330 gpm.
- Operated the KX P&T at 848 gpm, near the facility capacity of 900 gpm.
- Operated the HX P&T at maximum extraction well capacity. Monthly average at approximately 594 gpm.

FY2016 P&T Operations



200 West P&T



MAJOR ISSUES

Issue:

Experiencing regulatory agency delays in the approval of decision documents, including the legal reviews of the 100-D/H Proposed Plan (DOE/RL-2011-111), extended comment resolution on the 100-N RI/FS Report (DOE/RL-2012-15, Draft A), and Ecology approval of the 200-IS-1 Tri-Party Agreement change packages (C-013-01 and C-014-02), 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 Change (NOC) letters to RL as contract activities are impacted.

Status:

Delays in completion of the decision documents are reported weekly to RL management and monthly to RL, EPA, and Ecology senior management. Specific document status includes:

- 100-HR-3: Resolution of EPA legal comments on the PP continues. Several meetings were held between all three Agencies to resolve comments.

- 100-NR-2: Weekly project performance meetings are now being held infrequently (as issues arise or work is completed by Ecology), while RL reviews the revised Remedial Investigation (RI) chapters and the 6 new monitoring wells are installed.
- 200-IS-1: Ecology continues to review change package C-13-01, which was provided to them on December 19, 2015. Dispute has been extended to May 31, 2016.

Issue:

A small water leak near the base of Fluidized Bed Reactor A (FBR-A) was discovered on March 21, 2016. The leak condition deteriorated and carbon media was intermittently discharged to the bio pad on March 31, 2016. A decision to place Fluidized bed reactor (FBR) A out of service occurred on March 31, 2016.

Corrective Action:

The carbon media will be removed from the FBR while a statement of work is prepared and issued to obtain bids from qualified fiberglass repair vendors. Efforts to prepare the FBR for entry and repair will continue while the contract for repairs is processed.

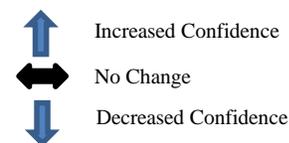
Status:

A schedule for repair will be provided upon input from repair vendors.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments								
		Month	Trend									
RL-0030/WBS-030												
Explanation of major changes to the project monthly stoplight chart: No major changes to the risk stoplight chart in the month of April.												
Realized Risks (Risks that are currently impacting project cost/schedule)												
SGW-NR2-03: Cultural Resource Reviews	Cultural and ecological resource reviews impact start of borehole, aquifer and all other actions in the OU due to defining the area as a TCP; resulting in cost and schedule impacts. However, results and significant delays for historical and archeological reviews are beyond the scope of CHPRC risk. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$2 million, 44 day			<p>Risk Event: The baseline scope of work for D&D of the P&T system assumed the project would rely on “normal work approaches” including conventional use of heavy equipment; however, the cultural resource review determined that a change in execution approach would be required and a more deliberate and cautious approach is warranted. To accommodate the cultural review, the project is prohibited from using construction machines off-road in areas of the site with old growth sage and other native plants. Instead, the work will be performed with hand tools.</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>Implement baseline change request to draw down management reserve to cover change in execution approach.</td> <td>3/1/16</td> <td>5/20/16</td> <td>0</td> </tr> </tbody> </table> <p>Risk Assessment: The project will continue to monitor this risk until the BCR is approved and implemented. This risk will no longer be reported once the BCR is processed. It will be tracked internally until the D&D project is complete. The risk will be closed when the D&D activities are completed in FY2017.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Implement baseline change request to draw down management reserve to cover change in execution approach.	3/1/16	5/20/16	0
Risk recovery action(s)	Risk Date	FC Date	%									
Implement baseline change request to draw down management reserve to cover change in execution approach.	3/1/16	5/20/16	0									

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																
		Month	Trend																	
RL-0030/WBS-030																				
<p>OPPORTUNITY: SGW-007A: Sampling Requirement Reduction</p>	<p>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</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$3 million, 0 day</p>	●	↔	<p>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.</p> <table border="1"> <thead> <tr> <th>Opportunity action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Obtain Agency approval of the revised SAPs.</td> <td>9/30/16</td> <td>50</td> </tr> </tbody> </table> <p>Opportunity Assessment:</p> <p>All ten CERCLA groundwater monitoring SAPs have been revised and transmitted to RL and the regulators. Five of the ten CERCLA SAPs have been approved by the Agencies. Comment resolution with the Agencies is ongoing for two CERCLA SAPs (100-HR-3 and 100-NR-2). It is expected that these SAPs will be finalized within 1 to 2 months. The 100-NR-2 SAP has been provided to Ecology for final checking. Ecology has completed their review of the 200-BP-5 and 200-PO-1 SAPs and comment disposition is underway. The 100-KR-4 SAP was provided to EPA on March 29, 2016.</p> <p>All 24 RCRA monitoring plans have been reviewed and revised, as appropriate. Twelve of the RCRA monitoring plans have been revised and transmitted to Ecology. We have received comments from Ecology on all but one monitoring plan (A/AX Farm). Two of the monitoring plans have been implemented and the remaining are in final comment disposition. CHPRC is planning to have them complete and implemented by calendar year-end.</p> <p>No alternative course of actions are needed at this time.</p>	Opportunity action(s)	FC Date	%	Obtain Agency approval of the revised SAPs.	9/30/16	50										
Opportunity action(s)	FC Date	%																		
Obtain Agency approval of the revised SAPs.	9/30/16	50																		
<p>PRC-005: Delayed Document Approvals</p>	<p>Required regulatory, nuclear safety, or transportation safety documents are not approved within the scheduled timeframes and impact CHPRC scheduled activities. Risk Handling Strategy: Transfer</p> <p>Probability: Very Likely (>90%)</p> <p>Worst Case Impacts: TBD</p>	●	↔	<p>Risk Event: Progress on several key decision documents have been delayed due to regulator comments and resource availability:</p> <ul style="list-style-type: none"> a) 100-D/H PP: Ecology comments on the draft Revision 0 100-D/H PP were not received within 30 days of transmittal (September 2014). As a result, it is not possible to complete the document within the timeframe identified in the Tri-Party Agreement without extensions. b) 100-N RI/FS: Ecology comments on the Draft A 100-N RI/FS and PP were not received within 45 days of transmittal (June 2013). As a result, it is not possible to complete the document within the timeframe identified in the TPA without extensions. c) 200-IS-1 RI/FS Work Plan (WP): RL invoked dispute resolution on December 10, 2013, for Tri-Party Agreement milestone M-015-112, Submit Draft B 200-IS-1 OU RI/FS WP. Resolution of this dispute, which includes the 200-IS-1 OU waste sites and TSD/past practice status, is required before the Draft B RI/FS WP can be submitted. <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>Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.</td> <td>Sept 2014</td> <td>May 2016</td> <td>90</td> </tr> <tr> <td>Resolution with Ecology on Draft A 100-N RI/FS Report.</td> <td>June 2013</td> <td>Dec 2016</td> <td>50</td> </tr> <tr> <td>Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.</td> <td>Dec 2013</td> <td>May 2016</td> <td>N/A</td> </tr> </tbody> </table> <p>Risk Assessment:</p> <ul style="list-style-type: none"> a) 100-D/H PP: Comment resolution meetings continue with EPA, Ecology and RL. A technical memorandum to evaluate the 104 100-D/H waste sites that were remediated following completion of the RI/FS is being prepared. b) 100-N RI/FS: No comment resolution meeting occurred during April, and that is due to Ecology staff availability. The document comment disposition period of performance is through September 2016 (16-NWP-061). c) 200-IS-1 RI/FS WP: Ecology continues to review the revised change package C-13-01, which was submitted to Ecology on December 19, 2015. TPA milestone negotiations require one month following change 	Risk recovery action(s)	Risk Date	FC Date	%	Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.	Sept 2014	May 2016	90	Resolution with Ecology on Draft A 100-N RI/FS Report.	June 2013	Dec 2016	50	Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.	Dec 2013	May 2016	N/A
Risk recovery action(s)	Risk Date	FC Date	%																	
Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.	Sept 2014	May 2016	90																	
Resolution with Ecology on Draft A 100-N RI/FS Report.	June 2013	Dec 2016	50																	
Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.	Dec 2013	May 2016	N/A																	

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0030/WBS-030				
				package C-13-01 agreement. The dispute resolution period has been extended to May 31, 2016.
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in the month of <i>April</i> .				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high risks identified in the month of <i>April</i> .				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in the month of <i>April</i> .				

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	8.4	10.9	8.9	2.5	29.6%	2.0	18.5%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (+\$2.5M/+29.6%)

The positive schedule variance resulted from the following:

- Positive current month schedule variance is due to implementation of BCR-030-16-027R0, *Defer Unfunded Work Activities to FY2017-FY2018*. Composite analysis data package development activities, 100-KR-4, 200-PO-1, and 200-UP-1 well drilling campaigns, well decommissioning planning tasks, and the purchase of a purge water truck were re-planned to reflect a delay in the start of work until FY2017 consistent with the client-identified work priorities and funding targets for FY2016.
- MBR cassette installation at the 200W P&T has proceeded more smoothly than anticipated. Safety platform construction continues to recover schedule as the work nears completion.
- The positive current month schedule variance was offset in part due to:
 - o Impact of revised cultural review requirements for 100-HR-3 well realignment activities that have caused the FY2016 construction work to be re-sequenced for later in the year.
 - o Construction of the 200-BP-5 pipeline has been slowed to align with the procurement actions needed to tie in the 200-DV-1 perched water pipeline. Both variances will be recovered in the current fiscal year.
 - o 200-DV-1 Operable Unit RCRA RFI/RI and CMS/FS documentation will not be started until the fieldwork is completed (currently scheduled for September 2017).

CM Cost Performance (+\$2.0M/+18.5%)

The positive cost variance resulted from the following:

- Continuing to experience efficiencies in the Groundwater Monitoring and Performance Assessment account associated with lower analytical laboratory costs. These lower costs are due to the use of



offsite laboratories, and lower geophysical logging costs during well drilling due to the competitive procurement process.

- The 200-ZP-1 Operable Unit experienced a positive current month cost variance on the performance MBR cassette installation. MBR cassette installation has proceeded more smoothly than anticipated resulting in the use of fewer resources (labor/UBS/subcontractor) than originally planned. FBR A was taken out of service on March 31, 2016, due to a leak that was detected. Plant flows have been lowered to accommodate the MBR cassette installation and the FBR leak, resulting in lower operational costs (fewer chemicals, etc.). This was offset, in part, by higher preventative/corrective maintenance costs to address the FBR leak.
- Received fewer comments than anticipated and completed preparation of new 200-IS-1 scoping summaries with fewer resources than planned.

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	1,227.8	1,214.4	1,190.1	(13.4)	-1.1%	24.4	2.0%	1,564.4	1,526.5	37.9

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$13.4M/-1.1%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$24.4M/+2.0%)

The variance is within reporting thresholds.

Variance at Completion (+\$37.9/+2.4%)

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	124.3	118.2	6.1
Incremental Scope Pending Change Management	0.0	0.3	(0.3)
RL-0030 –Total	124.3	118.5	5.8

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

RL-0030 FY2016 expected funding remains at \$124.3 million. The FYSF of \$118.2 million includes actions anticipated to meet funding targets.

Critical Path Schedule

Critical path analysis can be provided upon request.

Baseline Change Requests

BCR-030-16-023R0, *Definitization of CO #293 100-BC-5 RI-FS Rewrite*

BCR-030-16-024R0, *Definitization of CO#266, 200-BP-5 OU Construction and O&M of Transfer Pipelines*

BCR-030-16-025R0, *Incorporate Realized Risks for 300-FF-5 Stage B Installation & Treatment*

BCR-030-16-026R0, *Definitization of CO#298, 200-IS-1 Waste Site Change Package and WP Update*

BCR-030-16-027R0, *Defer Unfunded Work Activities to FY2017-FY2018*

BCR-030-16-028R0, *200-UP-1 Opportunistic Sampling*

BCR-030-16-029R0, *Update EVM to Address CR-2014-0206 and Schedule Health*

BCR-030-16-031R0, *100-D/H Proposed Plan Waste Site Evaluation*

BCR-PRC-16-039R0, *Undistributed Budget Adjustments April 2016*

BCR-PRC-16-040R0, *Realignment of Management Reserve*

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (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. This agreement was in public review through February 12, 2016 (extended from December 11, 2015). Modifications stemming from public comments are being discussed

between the agencies. The following table is a one year look ahead of 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 Completed					
M-016-110-T04	Implement Remedial Actions in all 100A RODs for GW OUs	12/31/16	8/27/15		Complete, white paper being prepared to substantiate target date completion.
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 May 31, 2016 (TPA change control form M-15-13-02).
Milestones Included in Tentative Agreement					
M-015-21A	Submit 200-BP-5 & 200-PO-1 OU FS Report and PP(s) to Ecology	6/30/15		5/30/18	Proposed due date is 6/30/2018
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	6/30/15		9/30/17	Proposed due date is 9/30/2017
M-015-110B	Submit CMS & FS & PP/Proposed CA Decision for 200-DV-1 OU to Ecology	9/30/15		9/30/23	Proposed due date is 9/30/2023
M-015-38B	Submit Revised FS Report and PP for CW-1, CW-3, & OA-1 to EPA	10/30/15		7/31/23	Proposed due date is 7/31/2023
M-015-91B	Submit FS Report and PP for 200-WA-1 to EPA	12/31/15		7/31/21	Proposed due date is 7/31/2021
M-015-92B	Submit RFI/CMS, RI/FS and PP/CAD for 200-EA-1 to Ecology	12/31/16		11/30/22	Proposed due date is 11/30/22
M-015-93B	Submit RFI/CMS, RI/FS and PP/CAD for 200-SW-2 to Ecology	12/31/16		1/31/23	Proposed due date is 1/31/23
Milestones on Schedule or at Risk					
M-024-58I	Initiate Discussions of Well Commitments	6/1/16		4/25/16	On schedule
M-024-67-T01	Conclude Discussions of Well Commitments	8/1/16		8/1/16	On schedule

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
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		4/6/20	At risk, unable to accomplish work due to TCP

SELF-PERFORMED WORK

The Section H.20 clause entitled, “Self-Performed Work,” is addressed in the Overview.

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)

April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The project completed the 200 East Tri-Annual Surveillances and completed the temporary repair to the PUREX stack sample line. The project also resolved comments on PUREX, Revision 9 Documented Safety Analysis (DSA) and continued the cold and dark planning for the demolition of high risk facilities at REDOX including 2710S, 2711S, and 2718S.

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	3	<ul style="list-style-type: none"> Employee was stung in the face by a bee. Body part affected: Face (23995)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

- Operations/Maintenance:
 - o Completed 200 East Tri-Annual Surveillances.
 - o Completed quarterly and semi-annual PMs of the 252-AB switchgear batteries.
 - o Removed Beryllium Characterization at 242B/BL.
 - o Completed temporary repair to PUREX stack sample line.
 - o Performed Miscellaneous Industrial Facilities Annual surveillances.
 - o Completed Quarterly Chemical Inventory.
 - o Completed PUREX annual ventilation system gauge calibrations.
 - o Conducted entry into REDOX for planning Plutonium Nitrate Bag Removal.
- Completed:
 - o 76 radiological facility surveillances.
 - o 21 PM activities.
- Nuclear Safety:
 - o Resolved internal comments on PUREX, Revision 9 DSA.
 - o Updated 224-B DSA, incorporating RL comments.
 - o Drafted B-Plant, Revision 7 DSA.
 - o Drafted 224-T Unreviewed Safety Question Determination (USQD).

- 207A South Retention Basin Closure:
 - o Awaiting Final Permit Modification and RL direction to backfill.
- Continued Progress on Canyon Stabilization Documents:
 - o Revised draft B-Plant Engineering Evaluation Cost Analysis (EE/CA) after RL review.
 - o Provided REDOX EE/CA for RL for review and addressed comments.
 - o Drafted PUREX Fire Hazards Analysis (FHA).
 - o Drafted hazard reduction documents for PUREX and B-Plant exterior demolition target structures (203A tank farm, 276-BA).
- Demolish REDOX Ancillary Facilities:
 - o Continued the cold and dark planning for the demolition of high risk facilities at REDOX including 2710S, 2711S, and 2718S.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0040/WBS-040				
Explanation of major changes to the project monthly stoplight chart:				
No major changes to the monthly stoplight chart in the month of April .				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of April .				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in the month of April .				
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>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: 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, and damper repairs). During the month of March, the sampling system failed for the second time within the past year. The problem became evident when the sample media was compromised. Upon investigation, the heat trace failed and the sample line was damaged. This resulted in a compromised sample for February data. An investigation determined the problem as mentioned above. A patch was installed on the existing sample line. Equipment is being procured to replace the damaged sample line. In addition, a design is being developed to provide RL with a conceptual design and estimate for replacing the entire PUREX stack sample system. This data will allow RL to provide PRC direction on how to proceed. No major changes in the month of April. The project continued efforts to procure equipment, develop a conceptual design, and estimate the replacement of the entire PUREX stack sample system.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	On-Going	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	On-Going	N/A								
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of April.										

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	2.5	1.3	1.3	(1.2)	-48.2%	0.0	0.3%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance: (-\$1.2M/-48.2%)

The current month unfavorable schedule variance is partially due to slow progress on completing Cold and Dark for the Demo of (3) REDOX High Risk facilities, 2711S, 2710S, and 2718S. Due to age of buildings and the lack of drawings, completing the reviews has delayed the start of demo by five months. There continue to be delays with 207A Removal. Sampling has been completed and results have been received, however, until approval from Ecology on the Closure Report, the project cannot backfill and close the site. In addition, the change out of the B Plant Pre-Filters has not completed as scheduled. In the baseline, the change out was scheduled to be completed every year. It has since been determined that the best ALARA practices is to change the filters at less frequent intervals which lowers exposure rate to employees. The remainder of the unfavorable variance is primarily due to delays in the Electrical Breaker PMs account. These delays were due to limited resources, which have been working higher priority work scope that has not allowed this work to progress at the rate planned. Also contributing to the variance,

electrical resources (both engineering and electricians) have been working on the Cold and Dark activities for the REDOX High Risk Facilities.

CM Cost Performance: (0.0M/0.3%)

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	414.7	411.3	379.6	(3.4)	-0.8%	31.7	7.7%	469.1	435.3	33.9

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance: (-\$3.4M/-0.8%)

The schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$31.7M/+7.7%)

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

- ARRA-funded work scope included efficiencies with Program Management (\$2.6 million), Cold and Dark and Characterization/Waste Identification Form teams (\$4.0 million), lower than planned capital equipment costs (\$3.0 million), efficiencies with Arid Lands Ecology (ALE) (\$3.7 million) and North Slope Facilities (\$1.2 million), disposition of railcars D&D (\$2.1 million), and Industrial 7 Project (\$3.6 million). This is offset by increased material and equipment costs, unexpected asbestos levels, and schedule delays in other ARRA D4 Projects (-\$15.3 million). Efficiencies in Outer Area Waste Sites (\$6.7 million) are primarily due to Remove, Treat, and Dispose (RTD) O-Zone Waste Sites, and ERDF pass back, which includes the operational efficiencies associated with use of the super dump truck. In addition, under runs in overhead allocation and Usage Based Services (\$7.4 million) contributed to the favorable cost variance.
- The remaining CTD favorable cost variance in base-funded work is due to efficiencies for waste site remediation and D4 activities as a result of utilization of existing site equipment and less resources (\$1.0 million), S&M costs less than expected (\$4.3 million), U Plant completion of the sampling of Cell 30 with less resources than planned (\$1.1 million), Program Management utilizing less resources (\$3.6 million), Emergency Response activities (\$0.6 million) and an underrun in overhead allocations (\$2.1 million).

Variance at Completion (+\$33.9M/+7.2%)

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 040/RL-0040 Nuclear Facility D&D	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
Spending Forecast	23.6	21.4	2.2
Incremental Scope Pending Change Management	0.0	0.1	(0.1)
RL-0040 – Total	23.6	21.5	2.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

Project funding decreased by \$500K in April to temporarily transfer funds to another PBS.

Critical Path Schedule

Critical path analysis can be provided upon request.

Baseline Change Requests

BCR-040-16-009R0, *Definitization of REA 040 1449 Surveillance and Maintenance ZP-1*

BCR-PRC-16-036R0, *Incorporate FY2016 Fee Adjustment*

BCR-PRC-16-039R0, *Undistributed Budget Adjustments April 2016*

BCR-PRC-16-040R0, *Realignment of Management Reserve*

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (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-016-250	Develop three-year rolling prioritized scheduled to implement waste site removal actions	3/31/2016		3/31/2016	Complete
M-037-11	Complete Closure Requirements for 216-B-3 and 216-S-10	9/30/2016		9/30/2016	At Risk (being renegotiated to September 20, 2021 as part of tentative agreement).

SELF-PERFORMED WORK

The Section H.20 clause, entitled “Self-Performed Work,” is addressed in the Overview.

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)

April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The project continued progress on the 165 KE Asbestos Abatement, which included completion of the glove bag removal in basement water tunnel area and being 95 percent complete with the Cement Asbestos Board (CAB) removal in the main hallway. The project continued work on Area AB Waste Site remediation, including conducting the fourth round of in-process sampling on six individual waste sites.

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	1	N/A
First Aid Cases	2	6	<ul style="list-style-type: none"> 4/14/2016 - Employee was cutting, pushing and pulling wire and developed left shoulder pain. Body part affected: Shoulder (23983) 4/20/2016 - Employee was removing cable trays and developed abdominal pain. Body part affected: Abdomen (23988)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

- 165 KE Asbestos Abatement:
 - Completed glove bag removal in basement water tunnel area.
 - Completed 95 percent of CAB removal within 165KE in the main hallway.
 - Began Thermal System Insulation (TSI) removal in the "Boiler Room."
- Area AB waste site remediation:
 - Conducted fourth round of in-process sampling on six waste sites.
 - Began remediating 100-K-116.
 - Continued closeout of four waste sites.
- Completed 16 Radiological Surveillances.
- Supported preparation of Change Proposals and the PMB associated with CO #304, Initiate Transition of River Corridor Closure Contract (RCCC) Scope Activities into the Plateau Remediation Contract.
- Initiated development of 300-296 Waste Sites lifecycle estimate.

- CHPRC Transition Management Team conducted Meet and Greet with the WCH:
 - o 618-10 Waste Sites remediation project teams.
 - o ERDF project teams.
- Initiated Transition Item Checklist Due Diligence process for:
 - o 618-10 Waste Site.
 - o 316-4 Waste Site.
 - o 600-63 Waste Site.
 - o Remaining Closure Operations (five individual Waste Sites).

MAJOR ISSUES

Issue:

The current FY2016 RL-0041 baseline budget and funding to perform 100K AB Area waste site remediation is not sufficient to complete the entire scope. Funding is currently adequate to continue excavation through fiscal month May 2016. If additional funding is not received, work will stop prior to completion of the scope.

Corrective Action:

Continue working with RL to obtain agreement on the path forward for continued progress of AB waste site remediation, including increased funding and proposed budget changes.

Status:

Contract Mod was received increasing funds by \$1 million (extends excavation to fiscal month end May). Discussions continue with RL regarding additional funds needed.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0041/WBS-041				
Explanation of major changes to the project monthly stoplight chart:				
No major changes to the monthly stoplight chart in the month of April .				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of April .				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in the month of April .				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
Lifecycle Risk Triggers (Risk could be realized at any point of the project)				

<p>KBC-002: Subcontract Change Orders/Claims</p>	<p>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.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$1.5 million, 66 days</p>		<p>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.</p> <table border="1" data-bbox="885 336 1559 388"> <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 major changes in the month of April.</i> In March, BCR-041C-16-013R0 Convert Future Waste Remediation Tonnage to AB Waste Site was implemented to increase the AB Waste Site BCWS and allow for disposal of additional contaminated tons to ERDF up to the 100K parameter plus 10 percent or 447,803 tons.</p> <p>A contract modification will be prepared to add any tonnage needed to complete the AB area that exceeds 407,094 +10 percent value in tons. Discussions continue with RL regarding the need for additional funds later in the fiscal year that will be required to complete the AB Area.</p> <p>Increased communication/interface continues between the Project and ERDF to obtain delivery of containers needed to achieve planned production rates for waste site remediation needed containers.</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							
<p>Unassigned Risks (Pending ownership of identified risks/opportunities)</p>									
<p>No unassigned risks identified in the month of <i>April</i>.</p>									

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	0.7	2.6	2.6	1.9	254.3%	(0.0)	-0.2%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$1.9M/+254.3%)

The current month favorable schedule variance is primarily due to the accelerated performance of AB Waste Site remediation work scope. In the prior period, BCR-041C-16-013R0, *Convert future Waste Remediation Tonnage to AB Waste Site* was implemented to increase the AB Waste Site BCWS and allow for disposal of additional contaminated tons to ERDF, as directed by RL.

CM Cost Performance (-\$0.0M/-0.2%)

The cost variance is within reporting thresholds.

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	327.0	331.1	301.9	4.1	1.3%	29.2	8.8%	404.2	371.3	32.9

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$4.1M/+1.3%)

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$29.2M/+8.8%)

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 (+\$32.9M/+8.1%)

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	24.2	21.4	2.8
Incremental Scope Pending Change Management	0	20.0	(20.0)
RL-0041 - Total	24.2	41.4	(17.2)

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis:

The RL-0041 project funding increased by \$5 million in April (\$4 million for RCCC Transition; \$1 million for Area AB Waste Site Remediation). The FYSF increased slightly due to miscellaneous offsets.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Baseline Change Requests

BCR-PRC-16-036R0, *Incorporate FY2016 Fee Adjustment*
BCR-PRC-16-040R0, *Realignment of Management Reserve*

MILESTONE STATUS

None currently identified.

SELF-PERFORMED WORK

The Section H.20 clause, entitled “Self-Performed Work,” is addressed in the Overview.

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)

April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The Fast Flux Test Facility (FFTF) is being maintained 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

- Completed all weekly and monthly maintenance/inspections with the 400 Area Water System.
- Completed:
 - o 25 PM activities.
 - o Four operational surveillances.
 - o Four radiological surveillances.

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 spotlight chart:				
No major changes to the risk profile for the month of April .				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of April .				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in the month of April .				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high threat value risks identified in the month of April .				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in the month of April .				

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)	-2.5%	0.0	15.7%

Numbers are rounded to the nearest \$0.1M

CM Schedule Performance: (-\$0.0M/-2.5%)

The schedule variance is within reporting thresholds.

CM Cost Performance: (+\$0.0M/+15.7%)

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	21.2	21.3	17.3	0.0	0.1%	3.9	18.5%	26.5	22.9	3.6

Numbers are rounded to the nearest \$0.1 million

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

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$3.9M/+18.5%)

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

Variance at Completion (+\$3.6M/+13.5%)

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	1.9	1.3
Incremental Scope Pending Change Management	0	0	0
RL-0042 – Total	3.2	1.9	1.3

Numbers are rounded to the nearest \$0.1 million

Funds Analysis

Projected Funding remains unchanged from last month and the FYSF change is insignificant.

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-16-036R0, *Incorporate FY2016 Fee Adjustment*

BCR-PRC-16-040R0, *Realignment of Management Reserve*

MILESTONE STATUS

None currently identified.

SELF-PERFORMED WORK

The Section H.20 clause, entitled “Self-Performed Work,” is addressed in the Overview.

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



April 2016
CHPRC-2016-04, 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														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 / 03 / 28									
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788				b. PHASE				b. TO (YYYYMMDD) 2016 / 04 / 24									
c. TYPE CPAF		d. SHARE RATIO				c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18													
5. CONTRACT DATA																			
a. QUANTITY 1	b. NEGOTIATED COST 5,561,895	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 20,043	d. TARGET PROFIT/FEE 239,339	e. TARGET PRICE 5,801,234	f. ESTIMATED PRICE 5,693,887	g. CONTRACT CEILING 5,801,234	h. ESTIMATED CONTRACT CEILING 5,693,887	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 5,362,081						c. SIGNATURE			d. DATE SIGNED (YYYYMMDD) 2016 / 04 / 24										
b. WORST CASE 5,469,513																			
c. MOST LIKELY 5,454,548		5,581,938		127,390															
8. PERFORMANCE DATA																			
CAPN.PBS ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION					
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)			
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)									
RL-0011 Nuclear Mat Stab & Disp PFP	6,586	5,791	8,055	(795)	(2,265)	928,620	884,962	897,199	(43,657)	(12,237)	0	0	0	971,830	1,027,910	(56,079)			
RL-0012 SNF Stabilization & Disp	5,746	5,986	3,877	240	2,109	567,094	568,744	567,998	1,650	746	0	0	0	720,210	717,602	2,608			
RL-0013 Solid Waste Stab & Disp	7,753	8,230	7,710	477	520	1,045,703	1,044,975	979,400	(729)	65,575	0	0	0	1,332,665	1,260,113	72,552			
RL-0030 Soil & Water Rem-Grndwtr/Vadose	8,432	10,926	8,899	2,494	2,027	1,227,845	1,214,447	1,190,079	(13,399)	24,368	0	0	0	1,563,474	1,525,547	37,928			
RL-0040 Nuc Fac D&D - Remainder Hanfir	2,467	1,277	1,273	(1,190)	4	414,680	411,260	379,561	(3,421)	31,698	0	0	0	469,135	435,282	33,852			
RL-0041 Nuc Fac D&D - RC Closure Proj	743	2,634	2,640	1,890	(6)	327,039	331,145	301,929	4,107	29,217	0	0	0	398,788	365,868	32,920			
RL-0042 Nuc Fac D&D - FTF Proj	164	160	135	(4)	25	21,246	21,268	17,335	22	3,933	0	0	0	26,468	22,904	3,564			
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														6,856	6,856	0			
e. SUBTOTAL	31,892	35,004	32,590	3,112	2,413	4,532,227	4,476,800	4,333,500	(55,427)	143,301	0	0	0	5,489,426	5,362,081	127,345			
f. MANAGEMENT RESERVE														92,467					
g. TOTAL	31,892	35,004	32,590	3,112	2,413	4,532,227	4,476,800	4,333,500	(55,427)	143,301	0	0	0	5,581,893					
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																			
a. VARIANCE ADJUSTMENT																			
b. TOTAL CONTRACT VARIANCE														(55,427)	143,301		5,581,893	5,362,081	219,812

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT													PENDING UPDATE TO			
FORMAT 2 - ORGANIZATIONAL CATEGORIES													OMB No. 0704-0188			
DOLLARS IN													Dollars			
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)				
b. LOCATION (Address and ZIP Code) Richland, WA				b. NUMBER RL14788				b. PHASE				2016 / 03 / 28				
				c. TYPE CPAF				d. SHARE RATIO				b. TO (YYYYMMDD)				
								c. EVMS ACCEPTANCE				2016 / 04 / 24				
								X YES (YYYYMMDD) 2009 / 09 / 18								
5. PERFORMANCE DATA																
WBS.Resp Org Group WBS.Resp Org Code ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)						
34 - Env Program & Strategic Plng	233	677	596	444	81	61,154	61,059	56,837	(95)	4,221	0	0	0	82,402	80,359	2,042
35 - Business Services	0	0	0	0	0	472,524	472,524	448,488	0	24,036	0	0	0	472,524	448,488	24,036
36 - Prime Contract & Proj Integr	237	237	129	0	108	3,786	3,786	1,993	0	1,793	0	0	0	8,426	6,242	2,185
3B - PFP Closure Project	6,532	5,737	8,044	(795)	(2,306)	841,657	798,000	817,898	(43,657)	(19,898)	0	0	0	884,571	948,527	(63,956)
3C - Waste & Fuels Management Project	7,720	8,197	7,686	477	511	937,557	936,829	871,453	(729)	65,376	0	0	0	1,223,817	1,151,469	72,348
3D - Soil & Groundwater Remediation	8,141	10,191	8,259	2,050	1,932	1,067,412	1,054,108	1,027,685	(13,304)	26,423	0	0	0	1,380,283	1,338,176	42,108
3G - K Basin Oper & Plateau Remediation Project	9,028	9,965	7,878	936	2,087	1,148,138	1,150,495	1,109,145	2,358	41,350	0	0	0	1,430,546	1,381,964	48,582
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													6,856	6,856	0	
e. SUBTOTAL (Performance Measurement Baseline)	31,892	35,004	32,590	3,112	2,413	4,532,227	4,476,800	4,333,500	(55,427)	143,301	0	0	0	5,489,426	5,362,081	127,345
f. MANAGEMENT RESERVE													92,467			
g. TOTAL	31,892	35,004	32,590	3,112	2,413	4,532,227	4,476,800	4,333,500	(55,427)	143,301	0	0	0	5,581,893		

CLASSIFICATION (When Filled In)												
CONTRACT PERFORMANCE REPORT FORMAT 4 - STAFFING											FORM APPROVED OMB No. 0704-0188	
1. CONTRACTOR			2. CONTRACT				3. PROGRAM			4. REPORT PERIOD		
a. NAME CH2M HILL Plateau Remediation Company			a. NAME Plateau Remediation Contract				a. NAME Plateau Remediation Contract			a. FROM (YYYYMMDD) 2016 / 03 / 28		
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2016 / 04 / 24				
			c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE YES 2009 / 09 / 18					
5. PERFORMANCE DATA												
Organizational Breakdown Structure (OBS) (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)								AT COMPLETION (13)	
			SIX MONTH FORECAST BY MONTH (Enter names of months)									
			+1 MAY 2016 (4)	+2 JUN 2016 (5)	+3 JUL 2016 (6)	+4 AUG 2016 (7)	+5 SEP 2016 (8)	+6 OCT 2016 (9)	REM FY2017 (11)	FY2018 (12)		
300 - Office of the President	23	587	6	6	6	6	5	5	58	63	741	
303 - Internal Audit	6	395	5	5	5	5	5	5	55	60	540	
304 - General Counsel	3	371	4	4	5	5	5	5	55	60	514	
31 - Communications	8	874	9	9	9	9	9	9	99	108	1,135	
32 - Safety Health Security & Quality	50	6,248	61	62	62	61	60	65	709	775	8,102	
34 - Env Program & Strategic Plng	42	4,125	39	39	39	38	38	51	554	600	5,524	
35 - Business Services	53	6,644	63	63	65	65	63	63	695	761	8,483	
36 - Prime Contract & Proj Integr	49	4,015	58	58	58	58	56	55	598	643	5,598	
38 - Project Technical Services	27	5,030	37	39	40	41	40	36	396	427	6,085	
3B - PFP Closure Project	323	43,631	381	394	392	388	393	297	1,558	19	47,453	
3C - Waste & Fuels Management Project	341	43,995	339	333	323	301	296	337	3,444	3,654	53,024	
3D - Soil & Groundwater Remediation	294	31,150	305	291	287	278	262	319	3,389	3,860	40,140	
3G - KBO&PR Project	303	41,723	354	367	347	357	351	301	3,539	3,263	50,603	
Grand Totals	1,523	188,788	1,661	1,670	1,637	1,611	1,583	1,549	15,150	14,293	227,942	

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) 2016/03/28		
b. LOCATION (Address and ZIP Code) Richland, WA 99354		b. NUMBER DE-AC06-08RL14788		b. PHASE Base		b. TO (YYYY/MM/DD) 2016/04/24			
		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:	31,892	35,004	32,591	3,112	9.8%	2,413	6.9%	1.10	1.07
Cumulative:	4,532,227	4,476,801	4,333,500	(55,427)	-1.2%	143,301	3.2%	0.99	1.03
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	5,489,426	5,362,081	127,345	2.3%	0.98				
Explanation of Variance/Description of Problem:									
<p>Current Period Schedule Variance: The current month favorable schedule variance is primarily due to RL-0030, implementation of BCR-030-16-027R0, Defer Unfunded Work Activities to FY2017-FY2018. In addition, RL-0041 accelerated performance of AB Waste Site remediation work scope contributed to the variance.</p> <p>Current Period Cost Variance: The current month favorable cost variance is due to RL-0012 accrual adjustment on the Annex Construction contract, which were accrued and experienced in prior months. Also contributing to the favorable cost variance is RL-0030's smooth installation process of the MBR Cassette. The efficiencies in installation of the MBR cassette has resulted in utilizing fewer resources and reduced operational costs. The variances for RL-0012 and RL-0030 are also partially offset by RL-0011's unfavorable cost variance stemming from lack of progress on discrete D&D work scope, while experiencing fixed D&D LOE support cost.</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. No other significant impacts overall.</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: No Corrective Actions are needed at this time.</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 \$127.3 million with \$92.5 million of Management Reserve (MR) for a total positive variance of \$219.8 million. For April, the project was 9.8 percent ahead of schedule and 6.9 percent under planned cost. CTD, the project was 1.2 percent behind schedule and 3.2 percent under planned cost. There were two significant BCRs in the period that impacted the PMB; BCR-030-16-024R0 - <i>Definitization of CO #266, 200-BP-5 Operable Unit Construction and Operations and Maintenance of Transfer Pipelines</i>; BCR-030-16-025R0 - <i>Incorporate Realized Risks for 300-FF-5 Stage B Installation & Treatment</i>. Additionally, revisions were made to Undistributed Budget (UB) via BCR-PRC-16-039R0 - <i>Undistributed Budget Adjustments April 2016</i> (details of changes listed below).</p>									
Contractually Required Cost, Schedule, EAC variance, Management Reserve Use									
<p>Variance in Performance BAC and EAC: The variance at complete (VAC) between the BAC and EAC this month is a +\$127.3 million, +2.3% and is within reporting thresholds.</p>									

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

Format 1 and 3 Contract Data:		Contract Price Adjustments	
CPs - In Process			
	Total Authorized Unpriced Work		\$20,043
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)			
	Total Negotiated Cost Changes		-
	Grand Total Adjustments		\$20,043

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

Undistributed Budget Activity			
BCR Number	Title	Fiscal Year	UB
BCR-PRC-16-039R0	<i>Undistributed Budget Adjustments April 2016</i>	2015 - 2018	\$ -6,951K

The Undistributed Budget decreased by \$6,951K for an overall increase to the PMB of \$3,476K during April.

Management Reserve Activity			
BCR Number	Title	Fiscal Year	MR
BCR-PRC-16-040R0	<i>Realignment of Management Reserve</i>	2015 - 2018	\$0K
BCR-030-16-025R0	<i>Incorporate Realized Risks for 300-FF-5 Stage B Installation & Treatment</i>	2015 - 2018	\$0K
BCR-012C-16-016R0	<i>Establish CAP 15-D-401 Sludge Retrieval Project Management Reserve Values</i>	2015 - 2018	-\$3,356K

Overall, there was a decrease of \$3,356K to Management Reserve (MR) during April.

Fee Activity			
BCR Number	Title	Fiscal Year	Fee
BCR-013-16-020R0	<i>Definitization of CO #279 SWITS Bar Code Reader</i>	2015 - 2018	\$12K
BCR-013-16-021R0	<i>Definitization of CO #276, Additional WESF Occupancy</i>	2015 - 2018	\$47K
BCR-030-16-023R0	<i>Definitization of CO #293 100-BC-5 RI-FS Rewrite</i>	2015 - 2018	\$76K
BCR-030-16-024R0	<i>Definitization of CO #266, 200 BP-5 OU Construction and O&M of Transfer Pipelines</i>	2015 - 2018	\$384K
BCR-030-16-026R0	<i>Definitization of CO #298, 200 IS-1 Waste Site Change Package and WP Update</i>	2015 - 2018	\$15K
BCR-040-16-009R0	<i>Definitization of REA 040 1449, Surveillance, Maintenance & Decommissioning for 200-ZP-1 Process & Ancillary Buildings</i>	2015 - 2018	\$7K
BCR-011-16-005R0	<i>Definitization of CO #297 PFP Slab Removal Documentation</i>	2015 - 2018	\$6K
BCR-PRC-16-036R0	<i>Incorporate FY2016 Fee Adjustment</i>	2015 - 2018	\$4,900K

Overall, there was an increase of \$5,447K to Fee during April.

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: 5/18/2016	Approved by:	Date:
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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

April 2016
CHPRC-2016-04, 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	40%
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*	25%
16-EMS-ADMIN-OB3-T1	Energy and natural resource conservation.	Establish electronic signature system for contracts using Adobe Acrobat.	9/30/16	70%
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	58%
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	46%

*This O&T cannot be closed out completely until after FY2016 ends. Progress will be at least 60 percent by July 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	8	<ul style="list-style-type: none"> 4/18/16 – Worker experienced scratchy throat after smelling an odor coming through the HVAC system. (23987)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- SHS&Q activities provide support and technical services to all CHPRC projects and central management of crosscutting services. There were no injuries during the month of April.
 - o Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
 - Continued support of site-wide standards committees and site-wide steering committees. DOE-0346, *Hanford Site Fall Protection Program*, is pending implementation of Revision 1A. DOE-0344, *Hanford Site Excavation, Trenching and Shoring Procedure*, is being routed for approval signatures; implementation pending. DOE-0352, *Hanford Site Respiratory Protection Program* is going through the revision process at this time.
 - Continued implementation of the Chronic Beryllium Disease Prevention Program (CBDPP) Revision 2A. Beryllium assessments have been completed on 1231 CHPRC facilities. Beryllium characterizations have been completed on 1194 CHPRC facilities.
 - Continued to provide support to the PFP for respiratory protection issues.
 - Continued support to projects on oversight of confined space work activities.
 - Support to projects on Fall Protection Work Permit (FPWP) reviews.
 - Support to projects on scaffolding program requirements.
 - Provided support for Globally Harmonized System and Chemical Management implementation across projects.
 - Provided training to Facility Chemical Custodians for Chemical Management Program.
 - Provided additional confined space training/briefings for KBO&PR, and PTS, and provided support to projects to approve additional competent/qualified personnel for DOE-0360 Revision 1, *Confined Space*.
 - Provided support to projects for ergonomic evaluation process.
 - Provided support to PFP, W&FMP, PTS, and KBO&PR for asbestos characterization activities.
 - Provided support to W&FMP and PTS at WESF for lead removal of surfacing material.
 - Continued support to PTS for the development of an approved FPWP for in-basin work.
 - Provided support to W&FMP in the development of FPWP for WESF ventilation activities.
 - Planning for 2016 Safety EXPO in May.

- o Radiological Control accomplishments:
 - Continued project support for clearance survey plan preparation, review, and approval.
 - Clearance of Personal Property Work Site Assessment (WSA) with focus on M&TE and non-routine items.
 - Continued Survey Simple upgrade efforts with implementation at 100K.
 - Continued oversight at PFP for specific high hazard activities (PRF Canyon, In-Situ activities).
 - Supported WESF with radiological work planning resource.
 - Continued support for project Hazard Review Boards, In-Progress ALARA Reviews and critiques.
 - Completed blue sheeting of all pertinent RCCC RadCon procedures.
 - Continued support of RCCC transition planning activities.
 - Reviewed and approved Technical Evaluations (TEs) for PFP, CPS&M and K basins.
 - Completed Radiological Work Permit (RWP) assessment SHS&Q-2016-WSA-16638.
 - Completed OJT development for “Operate Canberra Alpha Sentry CAM System”.
- o Nuclear Operations Support & Compliance accomplishments:
 - Annual Update of HNF-15500, *Plutonium Finishing Plant Deactivation and Decommissioning Documented Safety Analysis*, was implemented.
 - PRC-PRO-NS-8366, *Facility Hazard Categorization*, was issued.
 - Completed revisions to Solid Waste Operations Complex Master Documented Safety Analysis to incorporate T Plant Hydrogen Controls.
 - Six Central Plateau Surveillance and Maintenance Facility DSA are currently in CHPRC review or transmittal process.
 - Safety Basis documents and letters transmitted to RL include:
 - Letter, CHPRC-1601612, dated April 6, 2016, Transmittal of the 2016 Annual Update to HNF-11724, *CH2M HILL Plateau Remediation Company Safety Management Programs, for RL Review and Approval*.
 - Letter, CHPRC-1601741, dated April 11, 2016, *Transmittal of 2015 Unreviewed Safety Question Summary Report and Discussion of Annual Update to the Plutonium Finishing Plant Safety Basis Documents*.
 - Letter, CHPRC-1601500, dated April 12, 2016, *Transmittal of PRC-PRO-NS-062, Revision 3, Unreviewed Safety Question Process, for RL Review and Approval*.
 - Letter, CHPRC-1601974, dated April 27, 2016, *Documentation of Annual Review of the Package-Specific Safety Document for Steel Drums, CHPRC-01039, Revision*
 - Document approval received from RL:
 - Letter, 16-NSD-0037_RL Approval of CH2M HILL Plateau Remediation Company (CHPRC) Submittal of the Safety Design Strategy (SDS) Revision 7 for the Sludge Treatment Project Engineered Container Retrieval and Transfer System.
 - Transportation Safety
 - Completed internal securement for North Loadout Pit, Navy Pump Containers, and 55-, 85-, and 110-gallon drums.
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
 - 248 Condition Reports (CRs) were screened:
 - One significant issue identified.
 - One Adverse issue identified.
 - 140 Track until Fixed (TUF) issues identified.
 - 32 Trend Only (TO) items identified.
 - 74 Opportunity for Improvement (OFI) items identified.

- 180 CRs administratively closed.
- 298 CR actions administratively closed.
- Continued to provide Issues Management support to PFP.
- Transmitted Notification/Final ORPS report for EM-RL--CPRC-PFP-2016-0004, *Technical Error in Implementation of Plug and Cord Exception*
- Provided support and coordination for the Bi-Monthly a conference call with the DNFSB to discuss the PFP demolition planning and readiness assessment status.
- Provided support and coordination for a clarification meeting with RL to discuss how to respond to the DNFSB request for information specific to PUREX and REDOX surveillance reports for the past 3 years.
- Ten documents were provided in response to DNFSB requests for information.
- Provided support to the Bi-Monthly DNFSB Site Representative Meeting.
- One external Lessons Learned and one external Just-In-Time report were submitted to OPEXShare in April 2016: 2016-RL-HNF-0007, *Unanticipated Chemical Reaction During Waste Load-Out (LL)*; and 2016-RL-HNF-0003, *Filter and Drum Lid Combination Could Impact Filter Integrity (JIT)*.
- Coordinated Fact Finding on-site visit to PFP by the Office of Nuclear Safety Price-Anderson Enforcement.
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
 - Facilitated the Spring ISMS/QA EFCOG working meeting at Argonne National Labs.
 - Provided a briefing to Senior Management on the analysis of the FY2015 Safety Culture Survey.
 - Initiated planning and in-field activities for the 10 CFR 835, Subpart C, and Standards for Internal and External Exposure, surveillance activity scheduled through July.
 - Provided specific mentoring and feedback to assessors and responsible managers that conducted management assessments. Feedback was provided to help improve the quality, including clarity and readability of future reports.
 - Continued to support the S&GRP organization in evaluation of the calibration methods used for Geophysical Logging equipment.
 - Performed factual accuracy review of the EM-43/DOE RL audit of the K-Annex/ECRTS project.
 - Completed ten surveillances covering the areas of material and test control, Quality Assurance program implementation and verification of corrective actions.
 - Supported planning activities for PFP Readiness Assessment.
 - Provided assistance to Emergency Preparedness reviewing drill packages, observing drills, and providing feedback.
 - Completed PTS-2016-SURV-17060, Maintenance Requirements of Radiologically Controlled Vehicles (RCVs) Stored in Radioactive Material Areas (RMAs) on behalf of the Operations program organization. Three CRs generated: CR-2016-0881, -0882 and -0883.
 - Kicked off the assessment team for SHS&Q-2016-IA-17062, *Assessment of the CHPRC Assurance Program*.
 - Completed the Q2 quarterly update to the 2016 Performance Objectives, Measures and Commitments (POMCs) and presented at RL CAS/CAM monthly meeting.
 - Completed SHSQ-2016-SURV-17203, *Review of PRC-STD-TQ-40393, EP Training Program Description* for Emergency Preparedness. CR-2016-0808, -0809, -0811, and -0812 initiated.
 - Facilitated an Assessment Planning Workshop in April; which was well attended and included RL representatives who commended the workshop.
 - Completed SHS&Q-2016-SURV-16204, Annual S/CI Program assessment.

- Developed Annual QA Submittal for review and approval.
- Developed and completed Management Assessment Plan for the Annual EM Corporate QA Metrics.
- Provide assistance, support and overview of Field Automated Checklist Tracking System, (FACTS) being developed for use at Central Waste Complex.
- o Fire Protection accomplishments:
 - Fire Protection continues to adjust staff as necessary to cover all of the Projects and meet the needs of the work load. Two fire protection engineering positions are being pursued. One contract position is being converted to direct hire to improve long term support and reduce costs.
 - CHPRC attended Workshop to aid in moving forward on the IT&M issues with the Hanford Fire Department. A final report was issued by MSA on the workshop. Actions are being worked based upon the output of the Workshop. Follow on meetings will be held to status actions.
 - CHPRC, MSA and WCH participated in an analysis to determine a way to resolve the issues with reporting when IT&M is going beyond the scheduled due date or beyond grace. MSA FSM is working on developing a reporting process to notify other Prime Contractors of IT&M that will not be completed within the required time periods and the causes associated with the delay.
 - An increased number of Fire Hazards Analyses are being developed using a standard format for consistency.
 - Based upon the Triennial Fire Protection Assessment revisions to procedures to improve compliance and consistency are occurring.
 - TSR Surveillances:
 - SWOC:
 - o 2T-16-00970/S, T Plant 3 Month Combustible Surveillance.
 - PFP:
 - o ZAP-000-029, Checklist 2, Monthly Sheet 2 (TSR)
 - o ZAP-000-029, Checklist 3, Bi-Weekly/Monthly 3 (TSR)
 - o ZAP-000-029, Checklist 4, Weekly Fire Loading 4 (TSR)
 - o FS Supply Valves 1 (TSR).
 - Fire Hazard Analysis (FHA):
 - o The 105KW Complex FHA is nearing completion.
 - o The T Plant FHA has been published and is being submitted with the SWOC MDSA package.
 - o The REDOX FHA has been submitted to the HFMO for review and comment.
 - o A new FHA for 241-Z-361 and 216-Z-9 has been updated based upon internal comment review.
 - o The PUREX FHA is in Tech Editing.
 - o The SWOC FHA has been submitted to HFMO for review and comment.
- 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:** Continued implementation of Revision 2A across CHPRC. Comment resolution is complete for Revision 3 and is being routed for signature.
 - o **Action:** Beryllium (Be) facility assessments and characterization continues as scheduled. Beryllium facility assessments have been completed on 1231 CHPRC facilities. RCCC work

scope is being reviewed for Be implementation and potential concerns for due diligence prior to transition to CHPRC.

- 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. Recordable injury trend across CHPRC has improved, and continued focus is necessary. Projects have identified and are implementing additional actions, which are helping to reduce injuries and first aids.
- o **Issue:** PFP Support.
- o **Status:** Supporting PFP with additional OS&IH personnel and RadCon personnel, from the SHS&Q Central group for oversight of high risk work activities.
- o **Action:** Supporting PFP initiatives, supplied breathing air system issues; radiological & safety oversight, clearance survey plan upgrades, demo readiness preparations, ACL extensions, and J plan waste path forward.
- o **Issue:** Fire Protection program weaknesses.
- o **Status:** Program weaknesses continue to be identified and corrective actions are underway to improve program. Additional personnel resources have been hired to support projects.
- o **Action:** Continued interface with MSA to work off CHPRC back log items on the MSA IT&M log and to improve MSA HFD support to CHPRC projects. Recent RL concerns regarding slow improvements and continuing issues with MSA ITM have been raised by RL and are being addressed. Working with CHPRC projects to schedule and perform back log of facility fire protection assessments. Continued focus on recent workshop actions and path forward.

Environmental Program and Strategic Planning (EP&SP)

Environmental Protection

- **Compliance Status**

- o A comprehensive company procedure for environmental asbestos requirements for demolition and renovation activities was published, incorporating lessons learned from recent activities. This formalizes previous guidance on asbestos requirements.
- o Assisted with transition planning for the 618-10 burial ground, and 324 Building transitions. This included assisting RL with evaluation of 324 Building Resource Conservation and Recovery Act (RCRA) closure plan revision options (to satisfy TPA Milestone M-089-06, due date June 30, 2016).
- o Clean closure certification for the FS-1 closure was submitted by RL to Ecology on April 7.
- o Ecology is preparing to go out for public comment on the closure plan submittal for the 207-A South Retention Basin. The public comment period for the WESF closure plan completed on April 27. This is in preparation for incorporating these units into Hanford Facility RCRA Permit Revision 8C.
- o Support to PFP continues in the area of compliance with asbestos ARARS in the CERCLA Removal Action Work Plan (RAWP). This includes development of numerous asbestos thorough inspection reports.

Environmental Compliance & Quality Assurance (ECQA)

- **Assessment Program**

- o A review of the timely retrieval of records in compliance to the Agreed Order and Stipulated Penalty at the Solid Waste Operations Complex (SWOC) was completed as a corrective action from the Clean Sweep Audit. ECQA requested records pertaining to waste management unit inspections, training, and emergency preparedness from the SWOC Records Management Specialist and SME and received the documents within the 24 hour requirement specified in the Agreed Order. This surveillance resulted in no findings or opportunities for improvement.

- o The closeout meeting for the FY2016 internal audit of the CHPRC EMS Program was held on April 21, 2016. The assessment, EP&SP-2016-IA-15088, focused on 10 of the 18 elements of international standard ISO 14001:2004, *Environmental Management Systems – Requirements with guidance for use*. Worker awareness and the effectiveness of corrective actions associated with FY2015 EMS audits were also assessed. Two findings, two opportunities for improvement and two noteworthy practices were identified. A final report will be issued by May 31, 2016.

Business Services

• Acquisition Planning:

- o Met with DOE-EM and NNSA representative to coordinate strategic sourcing events through the DOE/NNSA complex. To date, CHPRC's strategic sourcing savings is \$1.6 million and is projecting to exceed its FY2016 goal of \$2.9 million. In FY2015, CHPRC achieved a total savings of \$966K. FY2016 results are expected to be at least three and half times greater than FY2015 results.
- o Drafted proposal and contract language for the Building Trades Labor contract in support of transition activities for 618-10 remediation work.
- o Acquisition Planning Manager successfully demonstrated project management competence by passing the Project Management Institute's Project Management Professional (PMP) examination.

• Facilities & Property Management (F&PM):

- o FY2015 KPMG property system audit found the system substantially compliant, with six administrative continuous improvement findings. Closure documentation for initial committed actions was submitted in late April.
- o FY2016 Physical Property Inventory review is underway with field work completion date of August 31, 2016. Final inventory review reports and Balanced Score Card submittal by October 31, 2016. F&PM has completed locating 43.68 percent of 3,317 items through April 2016.
- o Completed transfer of MO2102 from WRPS to CHPRC at PFP. RL has signed and sent the Standard Form (SF)-122 to WRPS, ORP signature was secured to complete transfer.
- o Efforts continued on installing two self-contained showers (MO2506 & MO6500) at PFP, currently awaiting occupancy/operation permitting.
- o MO407 in the 200E area in process of transfer to MSA. Awaiting Inter-contractor Transfer Order (ICTO) signature from MSA.
- o Utility disconnects completed for MO223, MO506, MO507, and MO917. Ready for D&D.
- o 324 & 300-296 transition completed April 25, 2016. Successful transition, no outstanding actions.
- o MSA Fleet, Facilities, and Custodial notified of changes from WHC to CHPRC baseline of assets. Sunflower database updated with new custodian assignments for all transitioned WCH assets.
- o Supported 618-10 transition kick off.

• Finance:

- o April month end completed with no suspensions.
- o Received corrective action plan related to Performance Audit of CHPRC Accounting System by KPMG – Response due May 19, 2016. Two of four findings have been addressed, the other two have planned actions in the next month.
- o Working proposed plan to address FY2009-FY2014 Incurred Cost Audit findings.

- **Human Resources:**
 - Successfully transitioned 21 WCH employees to CHPRC with the 324 transition. Orientation was a big success. Received all Personal Time Bank (PTB), service hours, and other benefits from WCH for a seamless transition. Completed 324 post transition action items.
 - With the transition of 324 Building successfully completed, lessons learned, as well as what worked well, are being gathered and applied to the upcoming 618-10 and ERDF transitions.
 - Human Resources transition planning is underway for 618-10 and ERDF. Organization charts have been finalized, and the staffing plan timeline is complete. We have job descriptions for all the identified positions transitioning and are on track to meet our June 15, 2016 deadline of having all offers extended to exempt and nonexempt employees identified to transition (28 offers for 618-10 and 20 offers for ERDF).
 - In support of CHPRC's Affirmative Action Plan, Staffing and Development partnered with the EEO/AA representative to attend the 2016 Veteran, Dependents, and Graduates Job Fair hosted by the Greater Yakima Chamber of Commerce at the Yakima Convention Center.
 - Staffing and Development joined in the effort to get young people to stay in our growing area and addressed the undesirably high unemployment in Washington by recruiting at Congressman Dan Newhouse's 2nd annual free job fair at Columbia Basin College.
 - In a record setting day, the HR team screened 451 applicants who responded to a recent posting for 25 RCT openings. The packet was screened down to less than 40 qualified applicants and was routed to the hiring manager in under 24 hours.
 - HR continues to support ongoing safety within the organization and building. Another HR team member stepped up to fill one of the Staging Area Manager roles as part of the Facility Emergency Response Organization.
 - Five HR team members supported CH2M's community outreach at the Business Services Badger Mountain trail day reclaiming gravel that had separated from the trail and clearing away weeds that were blocking hiker's view of the trails edge.
 - Human Resources Compensation participated in the 2016 World at Work Salary Budget Survey. This survey is a component of our CY2017 Salary Increase Fund Notification that will be provided to RL in October 2016.
- **Labor Relations:**
 - Completed transition activities for twelve (12) Hanford Atomic Metal Trades Council (HAMTC) represented WCH employees transferring to CHPRC with the 324 Building work scope effective April 25, 2016. Initiated transition activities for the remainder of HAMTC represented employees transferring with the 618-10 and ERDF work scope at the end of August, 2016.
 - 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 have exchanged settlement proposals and will continue discussions in regards to these documents with intent to try and resolve issue without proceeding to arbitration.
 - Grievance PRC-014-096 dealing with jurisdiction of steam lines was heard by the arbitrator on March 23, 2016. Arbitrator's decision on the case is expected by mid-June 2016.
 - The parties reached a Settlement Agreement on Grievance PRC-014-108 dealing with new hire pay rates for the D&D Worker classification and therefore canceled the arbitration scheduled for April 27, 2016. (Note: This grievance number was incorrectly reported as PRC-014-109 in last month's report.)
 - Grievance PRC-015-022 requested by union to proceed to arbitration was withdrawn by the union on April 12, 2016
 - No new grievances were requested by the Union to proceed to arbitration during this reporting period.

- **Procurement:**

- o Awarded/amended 124 contracts with a total value of \$6.6 million. Additionally, awarded 144 new material purchase orders (PO) valued at \$1.2 million to support ongoing project objectives.
- o At the end of the first 91 months of the CHPRC project, procurement volume has been significant; \$2.3 billion in contract activity has been recorded with approximately 52.75 percent, or \$1.23 billion, in awards to small businesses. This includes 7,237 contract releases, 20,450 PO's, and 245,383 P-Card transactions.
- o Contract 48772-17 was awarded to StillWater LLC. on April 6, 2016. This is a firm fixed price contract for the "Installation of Two Plus Two Optional Wells in the 100-HR-3 (C9544, C9542, C9613, C9614)." This award is valued at \$284,610.00.
- o Contract 48772-18 was awarded to StillWater LLC. on April 6, 2016. This is a firm fixed price contract for the "Installation of Four Wells in the 100-HR-3 (C9584, C9585, C9547, C9546)." This award is valued at \$244,928.00.
- o Contract 58447-01 was awarded to Tacoma Pump and Drilling Co., Inc. on April 6, 2016. This is firm fixed price contract for the "Installation of Three Extraction Wells and One Optional in the 100-KR-4 OU." This awarded is valued at \$341,600.00.
- o Contract 36882, Release 18 was awarded to TSS on April 21, 2016. This is a firm fixed price contract for "S&GW Well Tie-ins at KR-4" SOW. This award is valued at \$151,000.00.
- o Contract 36882, Release 19 was awarded to Total Site Services on April 25, 2016. This is a firm fixed price contract for "S&GW Well Tie-ins at ZP-1" SOW. This award is valued at \$60,000.00.
- o Contract 36883, Release 26 was awarded to Ojeda on April 27, 2016. This is a firm fixed price contract for "S&GW Well Tie-ins at BP-5" SOW. This award is valued at \$205,789.19.
- o Contract 55747, Release 05 awarded to Apollo Sheet Metal Inc. on April 4, 2016. This is a firm fixed price contract for "Annex Maintenance." This award is valued at \$672,110.76.
- o Contract 55747, Release 08 awarded to Apollo Sheet Metal Inc. on April 19, 2016. This is a firm fixed price contract for "105KW Transfer Bay Column Berms." This award is valued at \$149,793.58.
- o Under Contract 53546, four releases were awarded to RC Engineering & Construction in April 2016 for project controls/planner/estimator support. These are labor hour/time & material releases awarded for a total NTE value of \$522,805.00.
- o Under Contract 53689, three releases were awarded to Terragraphics Environmental for geologist support. These are time & material contract releases awarded for a total NTE value of \$81,662.00.
- o Under Contract 56751, two releases were awarded to Babcock Service, Inc. for Business Systems Analysts/Planner Schedule support. These are labor hour/time and material releases awarded for a total NTE value of \$311,000.
- o Under Contract 54177, two releases were awarded to Intera Incorporated for modeling and risk assessment support. These are time & material releases awarded for a total NTE value of \$115,322.

Prime Contract and Project Integration (PC&PI)

- **River Corridor Closure Contract (RCCC) Transition:**

- o Continued progress on the implementation of Change Order 304, "Initiate Transition of RCCC Scope Activities into the Plateau Remediation Contract (PRC)" which authorized CHPRC to prepare a PMB for the RCCC scope transitioning to CHPRC; provided direction to proceed with transition of the 324 nuclear facility and ancillary buildings and 300-296 soil remediation project no later than April 30, 2016 to transition ERDF, the 618-10 and 618-11 burial grounds, and the balance of RCCC scope no later than August 30, 2016; and authorized CHPRC to prepare a

- change proposal for cost of transition and cost of executing the identified work scope which is being transitioned into the PRC.
- o During April CHPRC provided responses to RFIs received from RL related to the Change Proposals and PMB for the 324 facility min safe after transition, 300-296 waste site soil remediation design review, and ERDF operations.
 - o The 324 building, its ancillary facilities, and waste site 300-296 were successfully transitioned to CHPRC on April 25, 2016 as planned.
 - o Efforts continued on the development of the Change Proposal and PMB to be submitted to RL for the 618-10 Waste, 316-4 and 600-53 Waste Sites, remaining river corridor operations, and the 300-296 gap analysis.
- **Contract Compliance and Change Management (CC&CM):**
 - o In April, CC&CM received and processed 1 contract modification (506) from RL.
 - o The Correspondence Review Team received and determined the distribution for 69 incoming letters/documents. The Prime Contract Compliance Manager reviewed 28 outgoing correspondence packages.
 - o Issued CHPRC-1601032AR2, *Impact Assessment for Implementation of Quarterly Reporting of Maintenance Related Metrics from Deferred Maintenance Report*. The total Rough Order Magnitude (ROM) estimate to implement the required data collection/entry for reporting metrics at the level of Recommendation 7 of the Deferred Maintenance Report is \$477K.
 - o Submitted the following FY2016 Performance Measure Completion Packages:
 - PM-30-7-16, *Commence I-129 hydraulic containment operation by March 31, 2016.*
 - PM-12-5-16, *Add segregated settler material to EC-220 by September 30, 2016.*
 - PM-12-4-16, *By September 30, 2016, remove sample equipment from KW Basin Engineered Containers (ECs), remove top two sections, install divider plate to EC-230, and install new lids on the ECs.*
 - o No CPs/REAs Submitted (On or Ahead of Schedule):
 - RZero CPs/REAs submitted late.
 - o Six CPs/REAs in development:
 - CO 304, 4 CPs associated with transition of RCCC scope into the PRC include 618-10, 316-4, 600-63, Remaining Closure Ops, and direct and indirect portion of RCCC Scope Transition 041 Revision 1, RFP 1611, 236-Z and 242-Z Characterization and Slab Removal.
 - o Miscellaneous Estimating Support:
 - Performed a TCoPD review for RFP 1583 (April 5, 2016).
 - Supported RL requests for information on CO 304 RCCC Transition Scope.
 - o Estimating System:
 - Updated RS means information into Sage.
 - **Earned Value Management System (EVMS) Compliance and Reporting:**
 - o Progress continued to be made on EVM Assessment Corrective Actions. As of month end, 56 of 68 actions had been completed (82 percent complete).
 - o During April, EVMS C&R facilitated and supported the processing of 25 BCRs. This high volume of BCRs each month is projected to continue for the foreseeable future due to changes in RL priorities, the PRC scope changes, the RCCC transition, and implementation of the K West Basin Sludge Removal Project CD 2/3 baseline into the PMB.

- o Continued to support RCCC Transition planning with emphasis on developing the PMB and change proposals for scope that will transfer to CHPRC. Completed review and “Blue Sheeting” at WCH EVM related procedures.
- o Efforts on the transition to computer based training for the VAR training class continued. It is anticipated to be completed with a targeted completion date of May to June.
- o Continued to lead CHPRC EVM training and Qualification initiative. PC&PI became the first CHPRC organization to have 90 percent of personnel for which the required training, required reading, and qualification requirements defined by PRC-STD-TQ-52996, Earned Value Management Training Program Description, for personnel involved in the application of Earned Value Management to be in compliance with those requirements. PC&PI and the CHPRC Projects all have CRRS actions to have 90 percent of their personnel for which PRC-STD-TQ-52996 was applicable to as of April 22, 2015 to be in compliance with those requirements by December 31, 2016.
- o CHPRC continued to support the DOE PM-30/EFCOG initiative to update the DOE Management System Interpretive Handbook (EVMSIH).
- o CHPRC jointly hosted with WRPS a half day briefing in Richland with Mr. Davie Kester of DOE-HQ PM-30 on each contractor’s Earned Value Management System. This was the first CHPRC briefing to Mr. Kester, PM-30’s lead for the planned Revision 2 to the DOE Earned Value EVMSIH, on our EVMS system. The CHPRC briefing was intended to share CHPRC’s status on the implementation of EVM, including some of the tools CHPRC utilizes to insure compliance with DOE requirements and expectations as documented in the EVMSIH.
- **Information and Interface Management:**
 - o **Interface Management**
 - o Interfaces (Technical, Administrative and Regulatory):
 - Continue to monitor the isolation of the 100 Area Raw Water Fire Loop system by WCH/MSA.
 - Followed up on MSA service change for non-fire system Backflow preventer testing. Service will become, as requested, usage based through water utilities. Water Utilities SDD under revision to reflect the change. MSA will issue a communication regarding how the service will be requested and scheduled.
 - Supported and facilitated communications between WRPS at 222S and CHPRC at REDOX.
 - o Annual Forecast of Services:
 - Evaluating MSA resource needs and impacts related to RCCC Transition. Biweekly meetings with MSA are occurring to ensure ready to serve operations are not impacted.
 - o Inter-Contractor Issue Resolution:
 - Attended the monthly Integrated Biological Control meeting.
 - Attended weekly field interface and resource allocation meetings.
 - Hosted the April Contractor Interface Board meeting on Wednesday, April 27, 2016.
 - Supporting discussions between WRPS at ETF and CHPRC at the Modutanks facility, regarding lines of demarcation and maintenance on the “tie-in” to the ETF raw water line. Drafting an AIA to cover the new demarcations and contractor roles and responsibilities.
 - Continued working with Hanford Fire Department, CHPRC Projects (SWOC/PFP), and CHPRC Work Control to improve communications, and streamline planning/corrective maintenance items. The SDD J.3 ID#20 will be revised to include interim corrective measures until a more inclusive document can be drafted.
 - o Controlling and Service Agreements:
 - Continued efforts in supporting the annual review of the J.3 Service Delivery Documents.

- Draft ICD for MSA Electrical Utilities is currently routing to the MSA Electrical Utilities points of contact.
- Revision of HNF-46148, Water System Services, is in progress. Fire Protection Engineering is aligning Program and Project requirements for demarcations and maintenance responsibilities. These requirements will be added to the document for Water Utilities.
- Supporting ongoing discussions 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.
- Updated signatories on the “Stop Work AIA” (HNF-58406, Revision 1) per MSA and HAMTC request.
- o J.3 Table Maintenance:
 - In process updates being tracked for the RCCC Transition effort. Team meetings with MSA/WRPS to work on updates to the J.3 table has been scheduled.
 - The Projects completed their review and confirmation of proposed changes to the J.13/J.14 tables. This update will incorporate the recent transfer of ETF operations to WRPS among other assignments.
- o Internal Operations:
 - Completed internal work site assessment of MSA Usage Based Service SOW. Corrective action development is complete and actions have been entered in the CRRS system.
 - Drafting a new AIA to support RCCC transition, related to HLAN conversion at 618-10 and ERDF.
 - Completed/Closed Interface Management RCCC Transition Item Checklist items for the 324 Project Transition (i.e. J.3 Table update, J.13/J.14 updates, and Interface Agreement updates). Completed planning and began working to close the Interface Management RCCC Transition Item Checklist items for 618-10 and the Remaining Closure Operations scope.
 - HNF-48239, Revision 5, Roles and Responsibilities for the Safeguards & Security Program AIA has been updated and sent out for review and comment.
- **Information Management:**
 - o Provided IT, event logistics, and facilitation support to EZAC, PZAC, Ascent Training, and various onsite and offsite tours, corporate visits and meetings.
 - o Provided information clearance and release support for KBO&PR, S&GRP, W&FMP, SHS&Q and PTS documents.
 - o Supported numerous IT support requests for cellular phone issues/questions, meeting set-up, network connections, and printing.
 - o Completed RCCC Information Services and Records Transition checklists, including blue sheeting procedures for the 324 facility.
 - o Processed 20,959 Electronic Records into the Integrated Document Management System (IDMS).
- **Performance Analysis and Risk Management Integration (PA&RMI):**
 - o The Monthly meeting between the PA&RMI, Contractor Assurance and Regulatory Reporting, and Projects was held on April 19, 2016. The purposes of the monthly meetings are to review productivity data, to determine if trends exist across the CHPRC, and to provide recommended actions related to Corrective Actions. Company level metrics are being evaluated by the PA&RMI organization, in addition to Project specific metrics that are evaluated at the Project level. The KBO&PR and S&GRP organizations are presenting their data/evaluations as a part of the Project monthly Continuous Improvement Meetings. “Dashboard Metrics” are being tracked on the Productivity Tracking Log (PTL) web page. Field Presentations and Training continued to be provided. The pilot to automate Field Execution Schedule item integration into the PTL continued into April.

- o Technical and Administrative support was provided to the STP in responding to the DOE-HQ led External Independent Review/Independent Cost Estimate (EIR/ICE) reviews. Both review teams performed the on-site portion of their reviews the week of November 16, 2015. Actions identified during the Exit Briefing and in the formal report are being tracked. The EIR Team identified a total of 19 findings with eight classified as major findings. Clarification provided by the project team (RL and CHPRC) resulted in reclassification or deletion of four of the eight major findings. RL and CHPRC have provided factual accuracy feedback and have submitted a Correction Action Plan (CAP) in response to the findings, Communication continues with both RL and the EIR/ICE teams to finalize and close actions.
- o Progress continues to be made towards completion of the Productivity Corrective Actions. Completed 21 of 24 actions (88 percent). The KBOPR Management Self-Assessment was completed on May 5, 2016
- o PA&RMI Risk Management staff provided Risk Register Reviews for each of the key RL WBS elements (RL-011, RL-012, RL-013, RL-030, RL-040, RL-041, and RL-042). Analysis for the PFP, STP CAP, the WESF Stabilization and Ventilation Project, and numerous BCRs.
- o Risk Management, Requirements Management, and Business Process Evaluation support was provided to the RCCC Transition Team. PA&RMI staff continues to meet with WCH Risk Management/Requirements Management staff in support of transition of WCH work scope to CHPRC. Program information was provided by the WCH staff. These efforts are expected to continue over the next several months.
- o Closure of the Hanford Concerns Council contract was completed in February. Steps continue to competitively solicit offers for a replacement contract. Expressions of interest were received in February; proposals were received in March, proposal evaluation occurred during April, and contract award is projected to be completed in May.

Project Technical Services (PTS)

- **Engineering Services**
 - o Supported WESF Ventilation Project W-130, including:
 - Modified the related operating procedure to drain condensate from the HEPA housing.
 - Drafted instructions for monitoring fire screen differential pressure.
 - Drafted instructions for periodic lubrication of K3N fans.
 - Supported K3N Master Test matrix development
 - o Supported 324 Building Inspection of received Commercial Grade components
- **Procedures and Training**
 - o Continued Training and Procedure support for Sludge Treatment Project and 324 transition.
 - o Initiated support for 618 and ERDF transition.
 - o Continued review of PFP Nuclear Chemical Operator retraining/requalification around the application of a 24 month retrain frequency to the General Operations training.
- **Operations Program**
 - o ConOps/Work Control/Conduct of Work:
 - Worked to resolve hazard analysis requirements for chemical compatibility with engineering and IH input.
 - Participated in Lock out/Tag out Site Wide Kaizen.
 - Supported in Expectations Alignment workshop for Fire System Maintenance activities CHPRC/MSA.
 - Participated in Site Wide Hazardous Energy control Committee meeting.
 - Supported Radcon/IT with calibration procedures.
 - Worked 618-10 transition.
 - Supported emergency action level update for WESF to support ongoing filter upgrade.

- Finalized 324 turnover “Blue Sheeting” of Emergency Preparedness procedures and documents.
- o Emergency Preparedness:
 - Walking down the location of Emergency Analog phones at CHPRC facilities.
 - Issued PFP Drill Plan, Addendum 3.
- o Developed Building Emergency Plan for CSB issued for review.
- **Project Delivery**
 - o ERDF Transfer Line:
 - Completed install of ERDF transfer pumps and pressure testing of discharge piping.
 - Completed piping and valve work at UP1-4 pit.
 - Completed electrical work at ERDF pump house.
 - Completed Mechanical and electrical tie in at 200W P&T.
 - Completed transfer of Leachate from ERDF to ETF.
 - Final earthworks at UP1-4 to be scheduled following the transfer of Leachate to 200W P&T and completion of leak testing.
 - o W-130 Stabilization:
 - Refurbished ventilation skid delivered and installed on foundation.
 - Fans installed and electrical and mechanical connections commenced.
 - Completed 24” core drill on south wall for ducting.
 - Installed duct supports on exhaust pad.
 - o 289T FBR and CS platforms:
 - Completed erection of steel and painting of the FBR structure.
 - Continued erection of steel for the CS 6-PAK tank platforms – Forecast completion May 26, 2016.
 - o 100 Area Wells
 - Awarded 11 of 11 contracts for 2016 well realignments.
 - Completed 5 road crossings for HE43 & HE45.
 - Commenced road crossings at 100D for MJ06 & MJ07.
 - Completed HDPE bonding (19,200LF) at wells HE4, 45 & 25.
 - Routing of Type W cable and fiber optic cable at 100 area wells.
 - Commenced running of High-density polyethylene (HDPE) at well MJ26.
- **KW Annex Construction**
 - o Issued Request for Proposal for ECRTS process equipment installation in Annex (Phase II).
 - o Continued work package development for upcoming ECRTS process equipment installation activities.
 - o Performed corrective maintenance on items identified in preventive maintenance inspections.
 - o Continued exterior lighting modifications.
 - o Began transfer of custody of Phase I construction material to Phase II contractor.
 - o MSA continued work for the installation of the telecommunications in the Annex (HLAN drops and speaker boxes).
- **KW Basin In Basin Modifications Construction**
 - o Installed ECRTS Ingress/Egress Piping.
 - o Completed IXM header fabrication and hydrostatic testing.
 - o Completed the disassembly and removal of the Ingress/Egress lifting frame from the Basin
 - o Continued fabrication of formwork that will be installed in the Basin to support grouting of Ingress/Egress and Doghouse concrete placements – scheduled for May 9, 2016.

- **T Plant Modification Construction**

- o Continued work package development for Water Addition System installation, Leak Detection System Installation and removal of interferences for conduit installation.
- o Continued North Loadout Pit (NLOP) Equipment disassembly. Excellent progress made on high hazard work this week. Completed removal of all process lines and interconnects; removed Lexan panels and doors from LDC Transfer and Buffer Tank enclosures; removed the IP-2 waste container lid in the Tunnel and staged on the Canyon deck; and loaded the load plate and LDC Transfer Enclosure from the Canyon deck into the IP-2 waste container.
- o Relocated and set the LDC Overpack in Cell 10L, Position #1.

- **Communications**

- o Communications supported RL in the development of an article for the April 27, 2016, EM Update. The article focuses on CHPRC's Soil and Groundwater team and their ingenuity in managing resources and accelerating Hanford Site cleanup through the demolition of excess facilities.
- o Communications supported RL in the development of a presentation on demolition of the PFP for the Hanford Advisory Board's River and Plateau Committee.

PROJECT BASELINE PERFORMANCE

Current Month (\$M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Office of the President	0.2	0.1	0.5	(0.1)	-39.2%	(0.4)	-284.1%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	(0.0)	-22.5%
General Counsel	0.1	0.1	0.8	0.0	0.0%	(0.7)	-582.5%
Communications	0.1	0.1	0.1	0.0	0.0%	(0.0)	-5.2%
Safety, Health, Security and Quality	1.2	1.2	1.0	0.0	0.3%	0.2	16.4%
Environmental Program and Strategic Planning	0.4	0.4	0.4	0.0	0.0%	0.0	10.6%
Business Services	1.6	1.6	1.8	0.0	0.0%	(0.2)	-11.4%
Prime Contract and Project Integration	1.6	1.6	1.2	0.0	0.0%	0.4	27.0%
Project Technical Services	0.6	0.6	0.5	(0.7)	-0.1%	0.1	9.1%
Indirect WBS 000 Total	5.9	5.9	6.4	(0.1)	-1.5%	-0.6	-9.8%

Numbers are rounded to the nearest \$0.1 million.

Indirect WBS 000**CM Schedule Performance: (-\$0.1M/-1.5%)**

The variance is within reporting thresholds.

CM Cost Performance: (-\$0.6M/-9.8%)

The unfavorable cost variance is primarily attributed to RL's determination to allow litigation costs in one lump sum this time period to a subcontractor. These costs were somewhat offset by lower labor costs caused by staff charging to non-legal WBS elements.

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	2.3	2.4	3.1	0.2	7.7%	(0.6)	-26.5%	3.2
Internal Audit	0.6	0.6	0.6	0.0	0.0%	0.0	4.5%	1.1
General Counsel	0.8	0.8	1.3	0.0	0.0%	(0.5)	-60.0%	1.5
Communications	0.6	0.6	0.6	0.0	0.0%	(0.1)	-9.6%	1.0
Safety, Health, Security and Quality	8.2	8.2	6.9	(0.0)	-0.0%	1.3	16.4%	14.8
Environmental Program and Strategic Planning	2.8	2.8	2.5	0.0	0.0%	0.3	10.1%	5.0
Business Services	11.5	11.5	9.8	0.0	0.0%	1.7	14.9%	20.7
Prime Contract and Project Integration	11.5	11.5	10.8	0.0	0.0%	0.7	6.1%	20.7
Project Technical Services	3.8	3.9	3.5	5.7	0.1 %	0.4	9.7%	6.9
Indirect WBS 000 Total	42.1	42.3	39.0	0.2	0.4%	3.3	7.7%	75.0

Numbers are rounded to the nearest \$0.1 million.

Indirect WBS 000**FYTD Schedule Performance: (+\$0.2M/+0.4%)**

The variance is within reporting thresholds.

FYTD Cost Performance: (+\$3.3M/+7.7%)

The favorable cost variance is primarily due to an unplanned credit realized as a staff aug cost. The credit is from the liquidation of a general ledger account that collects rate adjustments on closed contracts. In addition, labor resource vacancies in process of being backfilled contribute to the variance. Also, contributing to the favorable cost variance is the accelerated completion of the final RCCC Transition Plan to RL in February 2016, completing ahead of the planned April 2016 date.

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 April.																														
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;"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Implement salary increase fund</td> <td rowspan="7" style="text-align: center;">FY2015</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Proposed PFP incentive program</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Draft retention and recruiting plan investment for FY2015.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop/implement CHPRC People Legacy Program.</td> <td>On Going</td> <td>N/A</td> </tr> <tr> <td>Target recruiting for key project resources</td> <td>9/30/18</td> <td>48</td> </tr> <tr> <td>Continue PFP resource transition plan</td> <td>9/30/17</td> <td>48</td> </tr> <tr> <td>River Corridor Closure recruitment</td> <td>9/30/18</td> <td>48</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	%	Implement salary increase fund	FY2015	Complete	100	Proposed PFP incentive program	Complete	100	Draft retention and recruiting plan investment for FY2015.	Complete	100	Develop/implement CHPRC People Legacy Program.	On Going	N/A	Target recruiting for key project resources	9/30/18	48	Continue PFP resource transition plan	9/30/17	48	River Corridor Closure recruitment	9/30/18	48
Risk recovery action(s)	Risk Date	FC Date	%																											
Implement salary increase fund	FY2015	Complete	100																											
Proposed PFP incentive program		Complete	100																											
Draft retention and recruiting plan investment for FY2015.		Complete	100																											
Develop/implement CHPRC People Legacy Program.		On Going	N/A																											
Target recruiting for key project resources		9/30/18	48																											
Continue PFP resource transition plan		9/30/17	48																											
River Corridor Closure recruitment		9/30/18	48																											
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																														
No critical risks identified in the month of April.																														
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																														
No high threat value risks identified in the month of April.																														
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.

SELF-PERFORMED WORK

The Section H.20 clause, entitled *Self-Performed Work*, is addressed in the Monthly Report Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified.

Appendix C

Capital Asset Projects



April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

**Appendix C.1
Capital Asset Project
RL-011.C1 Removal of 174 Gloveboxes from
234-5Z**



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

**April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1**

PROJECT SUMMARY

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	162
KPP Rooms/Areas Ready for Demo	-	-	60	60 rooms/areas

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 93 percent complete.

KEY ACCOMPLISHMENTS

234-5Z

- RMA Line:
 - o Completed the In-Situ size reduction cleanup efforts.
- Duct Level:
 - o Completed size reduction of filter boxes 1P and 3P.
 - o Completed separation of filter box 9B.
 - o Abated 1,145 ft. of asbestos.
- Main Floor
 - o Set-up and completed saw cutting of Room 166 vault to remove HC-4 and HC-6 gloveboxes.

MAJOR ISSUES

None to report.

CORRECTIVE ACTION LOG

Control Account	Task Title	FY Year/ Month	CAM	Status	Forecast Completion	Actual Completion	Assigned To
011.05.01.01	Complete Size Reduction and Cleanup RMA/RMC	2/2016	Mike Douglas	Open	3/31/16		Mike Douglas

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

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

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments		
		Month	Trend			
RL-0011/WBS-011.05.01.01.06 (CAP.1)						
Explanation of major changes to the project monthly stoplight chart: No major changes to the monthly stoplight chart in the month of April .						
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 April .						
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.		
				Mitigation action(s)	FC Date	%
				None identified at this time.		
Mitigation Assessment: No change in the month of April . 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.						
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)						
FY2016 Risk Triggers (Risk could be realized in FY2016)						
PFP-GB-09: Bulk Area clean-out scope Increase for KPP Scope	Additional bulk area clean-out results in schedule delays due to contamination events in rooms 228A -228C and 235A3 after Insitu-size reduction activities are complete. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$0, 16 days *Cost increase will result in cost per day impacts from crews, and hotel load.	●	↔	Risk Trigger: During bulk area cleanout activities.		
				Mitigation action(s)	FC Date	%
				None identified at this time.		
Mitigation Assessment: Bulk area cleanout efforts have been completed in "A" line. "C" line activities were completed in April 2016. With the completion of "C" line activities, the probability and consequences of this risk occurring have been reduced and it will therefore no longer be reported on as a key project risk. The risk will continue to be monitored by the project until it has passed and no longer poses as a threat.						
Unassigned Risks (Pending ownership of identified risks/opportunities)						
No unassigned risks identified for RL-0011 in the month of April .						

Critical Path Schedule

The PFP Critical Schedule Path is a resource driven float path. The 242-Z team finishes up work getting 242-Z decontaminated and ready for demo. That team transitions to work E4 duct, filterbox removals, and 26 inch vacuum removals in the 234-5Z duct level. This gets 234-5Z 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 finally the RADTU & Basement areas.

Once complete, the final step is stabilization of the PFP site leading to completion of the final Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*.

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (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	09/30/16		7/24/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, safety pause associated with a radiological event, and reduction to five field work teams vs. eight, and increased durations to the E4 duct removal efforts caused the Tri-Party Agreement milestone projected completion date to gain 8 calendar days from the forecast date in the March report. This is as a result of identifying efficiencies to work parallel scope in the PRF canyon. 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. However, this Tri-Party Agreement completion is not expected to be met.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified at this time.

RL-011.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



April 2016
CHPRC-2016-04, 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 RL 0011 C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2016 / 03 / 28											
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 04 / 24											
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18											
5. CONTRACT DATA																	
a. QUANTITY 1	b. NEGOTIATED COST 317,545	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 9,878	e. TARGET PRICE 327,423	f. ESTIMATED PRICE 345,071	g. CONTRACT CEILING 327,423	h. ESTIMATED CONTRACT CEILING 345,071										
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											
					c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)										
a. BEST CASE 332,800																	
b. WORST CASE 335,266																	
c. MOST LIKELY 335,193		317,545		-17,648													
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								
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
RL-0011 Nuclear Mat Stab & Disp PFP																	
RL 0011 C1.02 Maintain Safe & Compliant PFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RL 0011 C1.05 Disposition PFP Facility	0	114	71	114	43	235,360	234,261	258,832	-1,099	-24,572	0	0	0	235,514	260,013	-24,498	
RL 0011 C1.06 Project Management & Support	0	0	0	0	0	11,990	11,990	12,477	0	-487	0	0	0	11,990	12,477	-487	
RL 0011 C1.90 Usage Based Services Distributions -PBS RL-11	0	0	0	0	0	7,221	7,221	7,731	0	-510	0	0	0	7,221	7,731	-510	
RL 0011 C1.98 Ramp-up and transition	0	0	0	0	0	19,399	19,399	19,253	0	147	0	0	0	19,399	19,253	147	
RL 0011 C1.99 PBS RL-11 UBS, G-n-A, Direct Distrib	0	0	0	0	0	41,028	41,028	33,328	0	7,700	0	0	0	41,028	33,328	7,700	
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d. UNDISTRIBUTED BUDGET																	
e. SUBTOTAL	0	114	71	114	43	314,997	313,898	331,620	-1,099	-17,721	0	0	0	315,152	332,800	-17,648	
f. MANAGEMENT RESERVE														2,393			
g. TOTAL	0	114	71	114	43	314,997	313,898	331,620	-1,099	-17,721	0	0	0	317,545			
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																	
a. VARIANCE ADJUSTMENT																	
b. TOTAL CONTRACT VARIANCE																	
								-1,099		-17,721					317,545	332,800	-15,255

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 C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2016 / 03 / 28	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 04 / 24	
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	114	71	114	43	254,570	253,471	279,039	-1,099	-25,568	0	0	0	254,725	280,220	-25,495
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET																
e. SUBTOTAL (Performance Measurement Baseline)	0	114	71	114	43	314,997	313,898	331,620	-1,099	-17,721	0	0	0	315,152	332,800	-17,648
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	0	114	71	114	43	314,997	313,898	331,620	-1,099	-17,721	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 RL_0011_C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2016 / 03 / 28	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 04 / 24	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)											AT COMPLETION (15)	
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 MAY 2016 (4)	+2 JUN 2016 (5)	+3 REMAIN FY16 (6)	+4 FY17 (7)	+5 FY18 (8)	+6 FY19-FY24 (9)	AT COMPLETE (10)	(11)	(12)	(13)	(14)		
35 - Business Services	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project	4	15387	6	0	0	46	0	0	0	0	0	0	0	0	15439
g. TOTAL DIRECT	4	15404	6	0	0	46	0	0	0	0	0	0	0	0	15456

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 RL_0011_C1 - PFP D&D (ARRA/Base)		a. FROM 2016 / 03 / 28	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 04 / 24	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE No X Yes		2009 / 09 / 18	

5. Evaluation

Direct Projects

	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	0	114	71	114	-	43	38%	-	1.61
Cumulative:	314,997	313,898	331,620	-1,099	0%	-17,721	-6%	1.00	0.95
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	315,152	332,800	-17,648	-6%	-	1.06			

Explanation of Variance/Description of Problem:

Schedule Variance: The positive schedule variance was attributed to completing historical BCWS associated with the the In-situ size reduction team painting and stabilizing the RMA and RMC control rooms following completion of In-situ Size Reduction at a more efficient rate than planned in the baseline. The team has completed all work scope associated with the 011.05.01.01.06.06 work package and transitioned to other high priority work scope within PFP.

Cost Variance: The current month positive cost variance is attributed to performing historical BCWS associated with painting and stabilization of the RMA/RMC control rooms more efficiently than originally planned.

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. With the work that was completed in the month of April and recognized efficiencies, the current schedule now reflects a completion date of May 30, 2017, a gain of 8 calendar days since March, 2016. The current RL-11 PBS project baseline schedule indicates that the PFP project will achieve slab-on-grade by January 19, 2017. Efficiencies have been identified in PRF that allow work to be performed on Filter Boxes in parallel with working on the gallery gloveboxes allowing the PFP facility to complete demolition of the 234-5Z facility which contains the gloveboxes needing to be removed to meet the end state of the KPP and TPA milestone. With the efficiencies expected to be recognized the gloveboxes to be removed to meet the demolition ready activities in 234-5Z, the current schedule shows that the work scope to meet the completion of the KPP milestone will complete May 22, 2017, a gain of 8 calendar days since March, 2016. The project expects to continue progress at the rate that has been experienced in the past several months. The PFP Project is not expected to meeting the TPA milestone M-083-00A due date of 9/30/16 for achieving slab-on-grade.

Cost Impact: Cost variance is not considered recoverable. Past performance and successful implementation of the above actions and impacts from stop works/safety pauses are reflected in the EAC. Considering the historical negative cost variance of 5.6% and CPI of .95 and ~\$17.7M cost variance to date and impacts of the safety pauses, stop works, contamination events, and increased complexity of the HA-9A/HC-9B size reduction efforts, the projected EAC has been decreased by \$200K resulting in a negative VAC of ~\$17.7M. This is due to increased duration of the timing to complete size reduction of the HA-9A glovebox as a result of impacts from stop works/safety pauses and incorporation of the use of the PreMaire breathing air suits that will be used to mitigate exposure to the worker and ease in in-situ size reduction of gloveboxes and transferred scope for removal of the gloveboxes from the facility to meet the end point criteria of the Project Execution Plan. This is partially offset by recognized efficiencies in cleaning up the RMA/RMC control rooms after completion of the size reduction efforts of the 9A/9B gloveboxes. As efficiencies and/or impacts continue to be recognized, the EAC will be adjusted. It is not expected that the entire cost variance will be recovered as there is only a small amount of scope remaining to complete the KPP.

Corrective Action:

Schedule: Complete size reduction of HA-9A (Complete) and Filter boxes 1P/3P (Complete), then cleanup RMA/RMC areas to allow for large breathing air team to begin working other scheduled work within the 234-5Z building. This will provide additional team members to work on other critical path work scope within the PFP facility and will help recover schedule delays on other non-capital asset work scope at PFP. This action will be closed in May reporting. Action: Mike Douglas (4/30/16)

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

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

Cost variance and schedule variance is not considered recoverable.

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

- Schedule Margin Analysis: There is no schedule margin associated with the RL-011.C1 capital asset account.
- IMS Data dictionary Changes: N/A
- Forecast Schedule with No Baseline: N/A
- UB Balance: N/A
- Negative ACWP: N/A
- EAC Analysis: Best Case = EAC; Most Likely = EAC + MR; Worst Case = ECWR or BCWR (whichever is greater) + ACWP + MR + Trend Log values not already included.
- Negative CV > VAC: N/A
- MR Transactions: N/A
- Freeze Period Changes: N/A
- Retroactive Changes: N/A

Prepared by:

Date:

Approved by:

Date:

Appendix C.2

Capital Asset Project

RL-011.C2 Demolition of PFP Facilities



T. E. Bratvold
Vice President for
PFP Closure Project

April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

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	-	-	15	-
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	-
Complete Demolition of PFP Ancillary Facilities	-	-	15	-
Turnover Facility to Long Term Surveillance & Maintenance	-	-	-	-

Summary:

The PFP Demolition Project is the final sub-set activity for completing the overall PBS RL-0011, Nuclear Materials Stabilization and Disposition of PFP. Completion of RL-0011.C2 will result in the remaining PFP set of facilities becoming “slab-on-grade” and allow transition of the PFP complex to long-term S&M.

KEY ACCOMPLISHMENTS

- Completed implementation of DSA/TSR Revision 13.
- Initiated transition of 234-5Z and 242-Z into the DSA Pre-Demolition phase.

MAJOR ISSUES

Issue:

PRF Canyon floor scrapings from J Pan, staged in collection trays on the Canyon floor expanded resulting in a clear and unanticipated chemical reaction. A previously noted hard substance was observed within the loose debris on J Pan. This hard substance was originally thought to be concrete (congealed, spalled wall fines) but upon further review was believed to be a plasticized material, which was not unexpected.

Corrective Action:

- Unpackaged and placed previously packaged J Pan wastes back in the PRF Canyon.
- Develop waste packaging instructions for J Pan wastes.
- PFP will perform a visual inspection of waste drums that contain PRF canyon waste prior to shipment from the facility.

Status:

- Waste packaging instructions for J Pan wastes were developed and waste has been packaged per the waste packaging instructions.
- PFP is performing 100 percent visual inspections of waste drums that contain PRF canyon waste prior to shipment.
- Waste Shipment of PRF Canyon Waste to CWC has commenced with shipment of Non-J Pan wastes. PNNL analysis of waste samples is complete. Fauske and Associates have been contracted to evaluate the potential for a self-accelerating thermal reaction within drums.

Issue:

On April 28, 2016, the wire rope on the PRF Crane jumped a sheave on the drum causing the rope to jam in the block during re-installation of a canyon strong back. The crane and strong back were placed in a safe configuration while a plan was developed to investigate the issue.

Corrective Action:

- Perform a canyon entry to inspect the wire rope and sheaves.
- Re-string the wire rope back onto the drum and block sheaves.
- Perform wire rope inspection and test functionality of crane.

Status:

- Initial inspection of viewable wire rope indicates minimal damage.
- Wire rope has been realigned on the drum.
- Wire rope is planned to be realigned on the block on May 26, 2016 followed by a complete wire rope inspection and functionality test.

CORRECTIVE ACTION LOG

Control Account	Task Title	FY Year/ Month	CAM	Status	Forecast Completion	Actual Completion	Assigned To
011.05.C3.05	Get PFP Facilities Ready for Demo	2016/03	Mike Douglas	Open	7/1/16		Mike Douglas
011.05.C3.05	Broker Subcontracted Resources When Possible	2016/03	Mike Douglas	Open	9/30/16		Mike Douglas
011.05.C3.01	Process BCR	2016/07	Mike Douglas	Open	5/31/2016		Mike Douglas

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 April .																
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 April .																
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;"> <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 change in the month of April . 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: Medium (26% to 74%) Worst Case Impacts: \$1.5 million, 30 days	●	↔	Risk Trigger: During pre-demolition/demolition activities in FY2016. Dates tracked in the FES. <table border="1" style="width: 100%; border-collapse: collapse;"> <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: No change in the month of April . 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;"> <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 change in the month of April . 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	PFP Demolition activities and hazard categorization provide for a Readiness Assessment; 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. <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.			

Critical Path Schedule

The PFP Critical Schedule Path is a resource driven float path. The 242-Z team finishes up work getting 242-Z decontaminated and ready for demo. That team transitions to work E4 duct, filterbox removals, and 26 inch vacuum removals in the 234-5Z duct level. This gets 234-5Z 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 finally the RADTU & Basement areas. Once complete, the final step is stabilization of the PFP site leading to completion of the final Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*.

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (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	09/30/16		7/24/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, safety pause associated with a radiological event, and reduction to five field work teams vs. eight, and increased durations to the E4 duct removal efforts caused the Tri-Party Agreement milestone projected completion date to gain 8 calendar days from the forecast date in the March report. This is as a result of identifying efficiencies to work parallel scope in the PRF canyon. 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. However, this Tri-Party Agreement completion is not expected to be met.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified at this time.

RL-011.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



April 2016
CHPRC-2016-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

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

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

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL 0011 C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2016 / 03 / 28	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 04 / 24	
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	3,355	1,555	645	-1,800	910	12,849	10,186	8,132	-2,662	2,054	0	0	0	47,529	44,024	3,505
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)	3,355	1,555	645	-1,800	910	12,849	10,186	8,132	-2,662	2,054	0	0	0	47,529	44,024	3,505
f. MANAGEMENT RESERVE														4,154		
g. TOTAL	3,355	1,555	645	-1,800	910	12,849	10,186	8,132	-2,662	2,054	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 / 03 / 28	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2016 / 04 / 24	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18				

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)											AT COMPLETION (15)	
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 MAY 2016 (4)	+2 JUN 2016 (5)	+3 REMAIN FY16 (6)	+4 FY17 (7)	+5 FY18 (8)	+6 FY19-FY24 (9)	AT COMPLETE (10)	(11)	(12)	(13)	(14)		
3B - PFP Closure Project	2	27	0	10	159	763	4	0	0	0	0	0	0	0	963
g. TOTAL DIRECT	2	27	0	10	159	763	4	0	0	0	0	0	0	0	963

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 RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM (YYYYMMDD) 2016 / 03 / 28
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO (YYYYMMDD) 2016 / 04 / 24
	c. TYPE CPAF	d. SHARE RATIO	
		c. EVMS ACCEPTANCE No X Yes	2009 / 09 / 18

5. Evaluation

Direct Projects

	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	3,355	1,555	645	-1,800	-54%	910	59%	0.46	2.41
Cumulative:	12,849	10,186	8,132	-2,662	-21%	2,054	20%	0.79	1.25
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	47,529	44,024	3,505	7%	0.95	1.04			

Explanation of Variance/Description of Problem:

Schedule Variance: The current month and contract to date negative schedule variance is due to delay of work scope associated with demolition of ancillary buildings due to resources being redirected to support higher priority critical path work associated with decommissioning of 234-5Z and 236-Z. 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. The delay in demolition of the main structures at PFP (234-5Z, 236-Z, and 242-Z) due to previous month radiological issues resulting in a PFP Management safety pause and stop works have also contributed to the schedule variance. Initiation of demolition of the 236-Z facility is currently forecast for August, 2016, with 242-Z and 234-5Z following thereafter.

Cost Variance: The current month and cumulative positive cost variance is associated with the late start of demolition of the ancillary facilities as a result of resource constraints caused by other higher priority critical path work to ready PRF for demolition, less project management support charges than planned being incurred in the 011.05.C3.01, PFP Demo Project Management/CD-4 Closeout and 011.05.C3.04 PFP Demolition Cross Cut LOE control accounts during the current period, and the PFP Demolition Readiness Assessment activity lagging as a result of the start of demolition activities being behind schedule. This is partially offset by 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.

Impact:

Schedule Impact: Efficiencies have been identified in PRF that allow work to be performed on PRF Filter Boxes in parallel with work on the gallery gloveboxes resulting in a gain of 8 calendar days since March to the critical path to achieving the TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities, due September 30, 2016. The total schedule delay cannot be recovered.

Cost Impact: Stop Works, Safety Pauses, and associated recovery actions have impacted the work to ready facilities for demolition. The total cost impact cannot be recovered. Mitigation actions are being reviewed and when finalized will be put in place to partially recover the cost impact. In addition, the start of mobilization for PFP demolition has been delayed as a result of discrete D&D ready for demolition scope lagging. The current EAC reduction 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 assumed in the PMB. This reduces the amount of demolition and project management labor resources and needed materials, resulting in the reduction of EAC to BCWS values. The projected net impact since March associated with these issues to the EAC is \$333K.

Corrective Action:

Schedule: Actions are being reviewed and will be put in place when finalized to support mitigation of the schedule delays. As a result of impacts from the safety pause in December, 2015, safe restart of high hazard work will be initiated to complete the ready for demolition activities for 234-5Z, 236-Z, 242-Z, and 291-Z to allow demolition of facilities in the PFP complex to begin. (Action: Douglas 9/30/16)

Cost: MSA resources (i.e., Heavy Equipment Operators, Crane Operators, Mechanics, etc.) will be loaned out to other CHPRC and other Hanford contractors when not required for PFP project work and thus offset unnecessary costs to the PFP project. Action: Mike Douglas (9/30/16)

NOTE: Corrective actions associated with stop works/safety pauses that are impacting the ability to initiate demolition activities in the RL-011.C2 capital asset project are addressed in the Operations and RL-011.C1 capital asset projects corrective action plans respectively. The Readiness activity is anticipated to reduce significantly as the more stringent Readiness Assessment and site exercise complete.

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

The positive cost variance for PM support will be addressed via BCR-011C-16-006R0, "Change EVM Type from LOE to Apportioned" and adjusted to comply with EVMS IH LOI 29.C.2. "LOE Work Packages with insignificant cumulative ACWP reviewed for purposes of preventing false variance reporting". The current positive cost variance on the Readiness activity is anticipated to reduce significantly as the more stringent Readiness Assessment and site exercise complete.

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. Overall, the C2 project has lost all of its schedule margin.
- IMS Data dictionary Changes: N/A
- Forecast Schedule with No Baseline: N/A
- UB Balance: N/A
- Negative ACWP: N/A
- EAC Analysis: Best Case = EAC; Most Likely = EAC + MR; Worst Case = ECWR or BCWR (whichever is greater) + ACWP + MR + Trend Log values not already included.
- Negative CV > VAC: N/A
- MR Transactions: N/A
- Freeze Period Changes: N/A
- Retroactive Changes: N/A

Prepared by:

Date:

Approved by:

Date: