

# Monthly Performance Report

May 2014

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

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

 **CH2MHILL**  
Plateau Remediation Company  
P.O. Box 1600  
Richland, Washington 99352

# Monthly Performance Report

May 2014

Date Published  
June 2014

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

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

 **CH2MHILL**  
Plateau Remediation Company  
**P.O. Box 1600**  
**Richland, Washington 99352**

**APPROVED**

*By Lee Ann Snyder at 10:05 am, Jun 25, 2014*

---

Release Approval

Date

**Approved for Public Release;  
Further Dissemination Unlimited**

**TRADEMARK DISCLAIMER**

Reference herein to any specific commercial product, process, or service by tradename, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

This report has been reproduced from the best available copy.

Printed in the United States of America



**J. C. Fulton**  
**President and Chief**  
**Executive Officer**

# Monthly Performance Report

U.S. Department of Energy Contract,  
DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

**May 2014**  
CHPRC-2014-05, Rev. 0

## CONTENTS

EXECUTIVE SUMMARY.....	2
TARGET ZERO PERFORMANCE.....	4
KEY ACCOMPLISHMENTS .....	6
MAJOR ISSUES.....	6
EARNED VALUE MANAGEMENT .....	6
FUNDING ANALYSIS .....	7
BASELINE CHANGE REQUESTS .....	8
SELF-PERFORMED WORK.....	11
GOVERNMENT FURNISHED SERVICES AND INFORMATION.....	11

### PROJECT BASELINE SUMMARY SECTIONS

Section A – Nuclear Materials Stabilization and Disposition of PFP (RL-0011).....	A
Section B – Spent Nuclear Fuel Stabilization and Disposition (RL-0012) .....	B
Section C – Solid Waste Stabilization and Disposition (RL-0013) .....	C
Section D – Soil and Groundwater Remediation Project (RL-0030) .....	D
Section E – Nuclear Facility D&D, Remainder of Hanford (RL-0040).....	E
Section F – Nuclear Facility D&D, River Corridor (RL-0041).....	F
Section G – FFTF Closure (RL-0042).....	G

### APPENDICES

Appendix A – Contract Performance Reports
Appendix B – Project Services and Support (WBS 000)

## EXECUTIVE SUMMARY

- CH2M HILL Plateau Remediation Company (CHPRC) celebrated the award of Star Status in the U.S. Department of Energy Voluntary Protection Program (VPP). Star status recognizes companies that demonstrate outstanding cooperative efforts among employees, management and RL to continuously improve safety and health programs.
- The Plutonium Finishing Plant Closure Project (PFP) team is training with new respiratory equipment in preparation for entries into the 242-Z Americium Recovery Facility (ARF), one of the most historic, contaminated, and challenging areas to decommission on the Hanford Site.
- The Soil & Groundwater Remediation Project (S&GRP) completed drilling at the bottom of the 100-D pit and began installing sampling wells. The wells will be used to learn more about the extent of contamination in the area.
- The Decommissioning, Waste, Fuels & Remediation Services (DWF&RS) Project and Project Technical Services (PTS) teams continued construction of the K West Annex for the Sludge Treatment Project (STP), including steel erection and coating of the mezzanine. The annex will be the building that houses the systems and equipment used to retrieve the final phase of highly radioactive sludge from the K West Reactor fuel storage basin.
- CHPRC employees participated in the 2014 Health & Safety EXPO, an annual community event that raises awareness for safety in the home and on the job. CHPRC was awarded “Best Corporate Presence” at the event.



Using a mock-up of the 242-Z facility, workers practice using new respiratory equipment and suits before entering contaminated areas at the Plutonium Finishing Plant.



Installing a well in the 100-D Area

## Focus on Safety

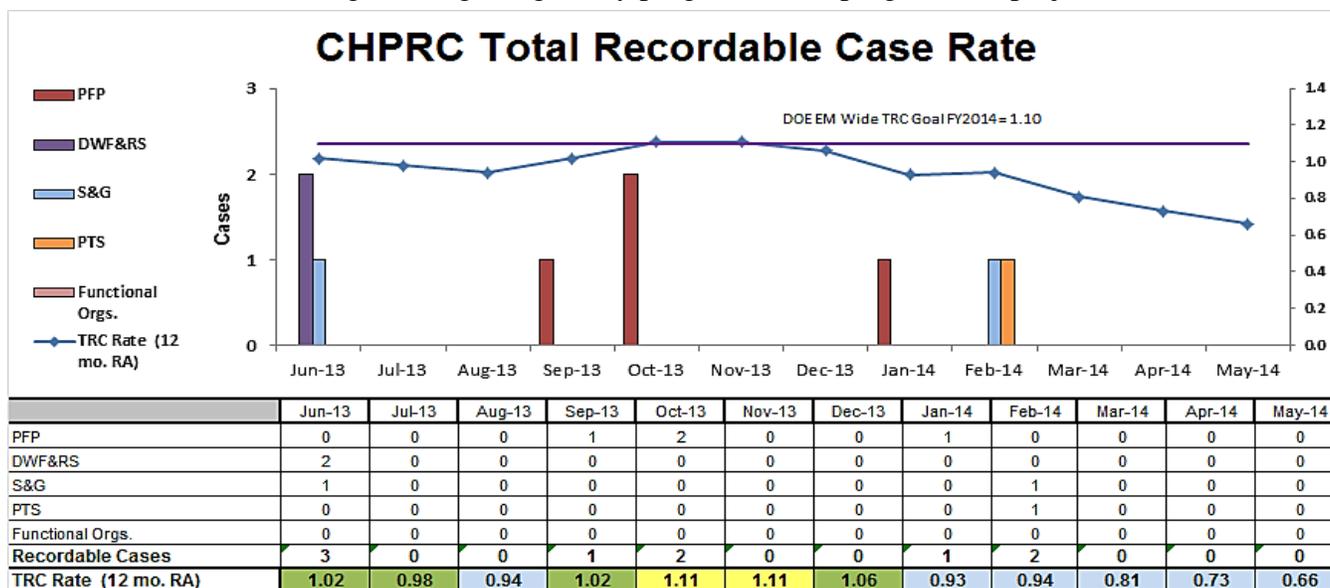
- In lieu of the President's Zero Accident Council meeting for May 2014, CHPRC participated in the 20th Annual Safety & Health Exposition (EXPO) on May 13-14 at the TRAC Center in Pasco, Washington. The EXPO is a community exhibition of information, equipment, supplies, and success stories that promote the health and safety of workers and their families both at home and at work. Work groups from the Hanford Site and organizations from across the U.S. share what they are doing to improve their performance in safety and health areas. CHPRC supports the EXPO by providing volunteers who help plan the event at the project, company and site levels, as well as set-up, staff, and take down the booths. The theme for CHPRC's booth was "Work, Home, or Play – Safety is a Family Effort." In addition to the booth, CHPRC displayed an emergency response trailer, as well as the TALON, a remote-operated vehicle capable of chemical and radiological monitoring for Emergency Response events, and the Mobile Vehicle Based Emergency Radiation System (MOVERS). MOVERS are a vehicle equipped with instrumentation to monitor for gamma, neutron, alpha and beta radiation, a Global Positioning System (GPS), a meteorological monitoring system, and is connected to the site intranet. CHPRC employees also supported additional booths by volunteering at the HAMTC Safety booth and the Hanford Historical booth, a popular stop for EXPO visitors who want to see vintage photos and documents from the Hanford Works early years. CHPRC's EXPO success was recognized with the award for "Best Corporate Presence" at the 2014 EXPO!
- In May, CHPRC celebrated Voluntary Protection Program (VPP) STAR Status! This VPP luncheon and safety meeting was held to recognize and thank all employees for reaching this high level of demonstrated safety. Employees received a shiny silver CHPRC VPP medallion as a keepsake. A small program featuring presentations by CHPRC President John Fulton, Safety, Health, Security and Quality Vice-President Terry Vaughn, and employee VPP Champions culminated in a formal presentation of the VPP STAR Certificate and Flag by RL Manager, Matt McCormick.
- The 2014 Region X Voluntary Protection Program Participant's Association 20<sup>th</sup> Annual 2014 Northwest Safety & Health Summit was held in Anchorage, AK on May 13-15. Ten CHPRC employees attended the summit and four of them hosted sessions:
  - o Arc Flash as a Safety Observer: What Should I Know?
  - o Is Your Safety Suspect of Counterfeit?
  - o Before You Pull the Plug on VPP
  - o Each year, the Region X VPPPA elects members to their leadership team. This year, the Summit attendees elected CHPRC employee and VPP Co-Chair Jack Griffith to the Director-At-Large position!
- Four "Thinking Target Zero" (TTZ) bulletins were published in May to convey important occupational safety, health and environmental messages:
  - o Grilling Safety
  - o VPP and Safety
  - o Outlet Safety
  - o EMS Objectives



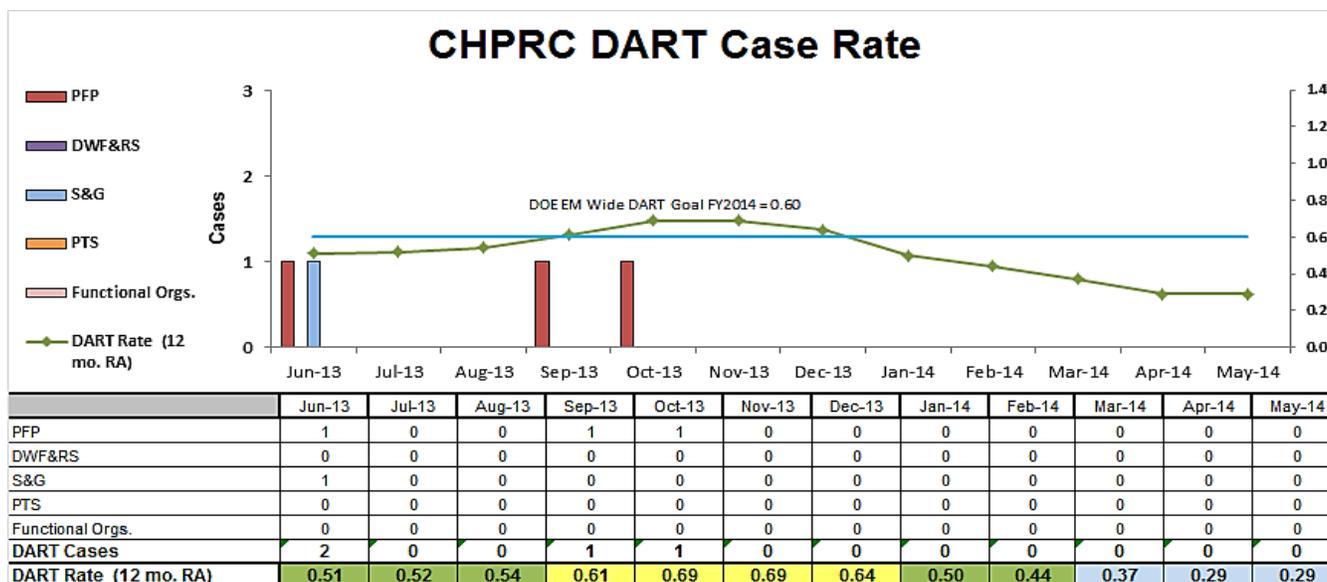
- May *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
  - o Update to the Injury Event Report Form
  - o Electrical Safety Reminder on Circuit Breakers and GFCI's
  - o Employee Job Task Analysis Procedure Revision
  - o Safe Driving Tips
  - o Bike to Work Month
  - o Health & Safety EXPO
  - o VPP – Employee Involvement
  - o Heat Stress Prevention
  - o Ergonomic Tips
  - o Safety Focus: Returning to Work Following a Holiday
  - o Rattlesnake Awareness
  - o “What Would You Do?” Ethics Awareness messages
  - o Injury/Illness Summaries and the TTZ of the week
- The May CHPRC Weekly Updates included two safety-related messages from Terry Vaughn, the Safety, Health, Security and Quality Vice-President. One message announced the safety meeting held to celebrate VPP STAR status. The second message reminded employees to take time to refocus on safety before beginning work following a long holiday weekend.

## TARGET ZERO PERFORMANCE May 2014

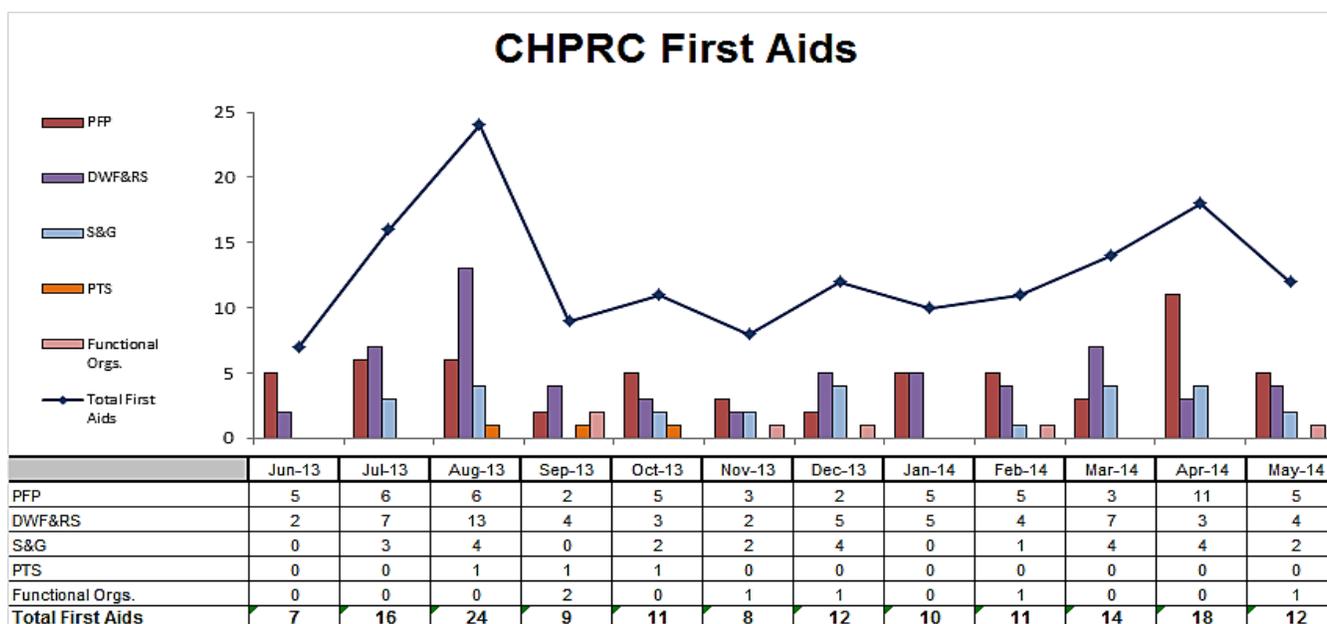
CHPRC continued focusing on integrating safety programs in all program and project areas.



**Total Recordable Injury Case (TRC) Rate** – The 12 month rolling average TRC rate of 0.66 is based on a total of 9 recordable injuries (5 recordable and 4 DART cases). There was one Recordable case in May. One case is being evaluated/investigated for potential recordability.



**Days Away, Restricted or Transferred (DART) Workdays Case Rate** – The 12 month rolling average DART rate of 0.29 is based upon a total of four Days Away cases. There were no DART cases in May 2014. CHPRC has worked in excess of 1.7 million hours without a DART case.



**First Aid Case Summary** – CHPRC reported 12 first-aid cases in May 2014; of these 12 cases, 4 cases required no treatment. There were no self-treated injuries. The contributors were six miscellaneous injuries two potential exposures (two cumulative trauma, one fiberglass sliver and one minor low voltage shock), three Sprains / Strains / Pains, two abrasions/contusions, and one insect bite.

## KEY ACCOMPLISHMENTS

### Projects

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

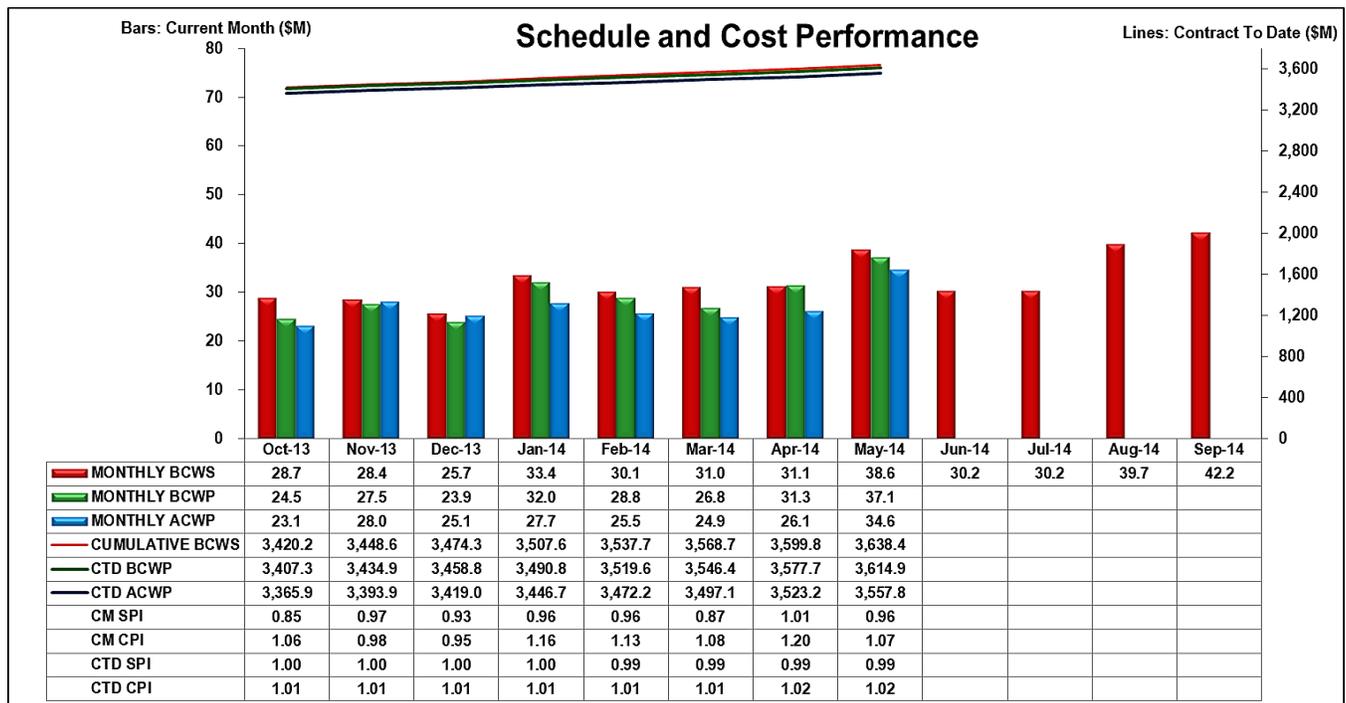
### Project Services and Support

- 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 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	10.9	8.7	9.2	(2.2)	(0.5)	693.3	668.2	702.2	(25.2)	(34.0)	935.4	963.9	(28.6)	
RL-0012 - SNF Stabilization & Disposition	5.6	5.6	5.6	0.0	0.0	418.5	418.3	427.4	(0.2)	(9.1)	692.6	708.6	(16.0)	
RL-0013 - Solid Waste Stab & Disposition	9.0	9.7	7.8	0.7	1.9	847.4	848.0	818.4	0.6	29.7	1,342.7	1,267.0	75.7	
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	10.9	10.6	10.3	(0.3)	0.3	970.3	972.2	960.1	1.9	12.1	1,514.1	1,497.0	17.1	
RL-0040 - Nuc Fac D&D - Remainder	1.1	1.4	1.2	0.3	0.2	384.3	383.6	353.5	(0.7)	30.1	491.9	460.1	31.8	
RL-0041 - Nuc Fac D&D - RC Closure Project	0.9	0.9	0.4	0.0	0.5	307.1	307.1	281.4	0.0	25.7	393.1	368.4	24.7	
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.1	(0.0)	0.1	17.4	17.4	14.8	(0.0)	2.7	26.5	24.1	2.4	
(Numbers are rounded to the nearest \$0.1M)	<b>Total</b>	<b>38.6</b>	<b>37.1</b>	<b>34.6</b>	<b>(1.5)</b>	<b>2.6</b>	<b>3,638.4</b>	<b>3,614.8</b>	<b>3,557.8</b>	<b>(23.5)</b>	<b>57.1</b>	<b>5,396.2</b>	<b>5,289.1</b>	<b>107.1</b>

### Performance Summary

CHPRC continues to track completion of contract scope within budget and is currently projecting a Variance at Completion of \$107.1M with \$78.1M of Management Reserve for a total positive variance of \$185.2M.

- For May, the project was 3.8% behind schedule and 6.9% under planned cost. For FY2014, the project is 6.0% behind schedule and 7.4% under planned cost. Schedule performance in May was within reporting thresholds. Overall cost performance in May was primarily attributed to realization of planned efficiencies in multiple projects.

## FUNDING ANALYSIS

### FY2014 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2014		Variance
		Projected Funding	Spending Forecast	
RL-0011	Nuclear Materials Stabilization and Disposition	106.9	104.6	2.3
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	72.2	69.4	2.7
RL-0013	Waste and Fuels Management Project	83.8	83.4	0.4
RL-0030	Soil, Groundwater and Vadose Zone Remediation	121.5	115.9	5.5
RL-0040	Nuclear Facility D&D, Remainder of Hanford	13.2	12.8	0.4
RL-0041	Nuclear Facility D&D, River Corridor	10.1	7.5	2.6
RL-0042	Fast Flux Test Facility Closure	2.3	1.7	0.6
<b>Total Base:</b>		<b>410.0</b>	<b>395.5</b>	<b>14.5</b>

#### Funds/Variance Analysis:

FY2014 Projected Funding did not change in May and remains at \$410.0M.

## BASELINE CHANGE REQUESTS

In May 2014, CHPRC approved and implemented eight (8) BCRs. The change requests are identified in the table below:

Change Request #	Title	Summary of Change
<b>Implemented into the Earned Value Management System for May 2014</b>		
BCR-011-14-00030	<i>Incorporation of Alternate Technical Approach</i>	This BCR incorporates the following items: 1) realigns scope to incorporate alternate technical approaches including drawing down Management Reserve (MR) for additional characterization activities required to achieve success with the new approach, 2) adds critical decision milestones required to achieve success with the alternate technical approach, 3) moves budget for future 222-S laboratory support work no longer required to be performed into MR, 4) adjusts future planning of work based on the alternate technical approach and resource availability, 5) incorporates minor changes to the WBS structure to help ensure proper collection of costs. This BCR increased the PMB by \$1,748K.
BCR-013-14-012R0	<i>BCWS Change for 310 Retention/Transfer System FY14 LOE Activities</i>	This BCR modifies the FY2014 Level of Effort Activities in WBS 013.11.05.01.02 - 310 Retention / Transfer System (310 RTS) to reflect remaining BCWS (May through September 2014) deferred into September FY14. This BCR better aligns BCWS while awaiting definitization of Change Order (CO) #236 Contract Modification for 310 Retention Transfer System Transfer to WCH. This BCR did not change the value of the PMB.
BCR-030-14-008R0	<i>Incorporate Definitization of CO #237, 200-DV-1 Transient Perched Water</i>	This BCR implements RL direction to implement Contract Modification (CM) 326, which definitizes CO #237, 200-DV-1 Transient Perched Water. Per the modification this BCR also moves well decommissioning scope to CLIN 7 to maintain PMB in alignment with the B.4-1 Table. This BCR decreased the PMB by \$3,058K.
BCR-030-14-011R0	<i>200-BP-5 Treatability Test Revision</i>	This BCR replans the 200-BP-5 Treatability Test activity from two into four activities by separating the 1-day step draw down (SD) test from the constant rate (CR) test portion of aquifer testing. This BCR did not change the value of the PMB.
BCR-030-14-012R0	<i>Definitization of CO #238, 100-NR-2 Aquifer Barrier Expansion</i>	This BCR implements RL direction to implement CM #329, which definitizes CO #238, 100-NR-2 Aquifer Barrier Expansion. Per the modification this BCR also moves well decommissioning scope to CLIN 7 to maintain PMB alignment with the B.4-1 Table. This change decreased the PMB by \$2,319K.
BCR-030-14-013R0	<i>High Risk/Value Materials &amp; Subcontracts Planning</i>	This BCR replans select FY2015 – FY2018 material purchases for the 200-ZP-1 Pump and Treat to separate annual chemical purchases from operations activities. This action was taken to be compliant with CHPRC-00003, <i>Project Controls System Description, planning requirements to specifically plan “high value” material (material valued over \$1M) in a separate P6 activity</i> . This BCR did not change the value of the PMB.
BCR-030-14-014R0	<i>Incorporate NTE for CO #254, CP Inner Area Cleanup Principles/Risk Assessment and Modeling Parameters Document</i>	This BCR implements RL direction provided by CM #327, CO #254, <i>Central Plateau Inner Area Cleanup Principles/Risk Assessment and Modeling Parameters</i> , and the associated Not-to-Exceed (NTE) value of \$1,000K (burdened). This BCR increased the PMB by \$1,000K.

Change Request #	Title	Summary of Change
BCR-PRC-14-010R0	<i>Incorporate NTE for CO #248, Implementation of DOE-0342, Rev 2A, Hanford Site Chronic Beryllium Disease Prevention Program</i>	This BCR implements RL direction provided by Contract Modification #312, which included CO #248, <i>Hanford Site Chronic Beryllium Disease Prevention Program</i> , and the associated NTE value of \$1.8M, to proceed with implementation of DOE-0342, Revision 2A, <i>Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP)</i> , published September 19, 2013. This BCR increased the PMB by \$895K.

### Management Reserve Activity

BCR Number	Title	Fiscal Year	MR
BCR-011-14-00030	<i>Incorporation of Alternate Technical Approach</i>	2014 - 2018	-\$1,748K

Management Reserve decreased by a total of \$1,748K during May.

### Fee Activity

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

There were no changes to Fee during May.

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):

### May 2014 Summary of Changes

	FYs 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
<b>April 2014 Estimate</b>									
PMB	3,391,477	389,983	434,634	425,976	373,283	382,610	2,006,487	5,397,964	5,397,964
MR	0	3,700	7,250	21,000	21,000	26,885	79,835	79,835	79,835
Fee	155,504	14,325	13,480	19,800	8,800	16,600	73,005	228,509	228,509
<b>Total</b>	<b>3,546,981</b>	<b>408,008</b>	<b>455,365</b>	<b>466,776</b>	<b>403,083</b>	<b>426,095</b>	<b>2,159,328</b>	<b>5,706,309</b>	<b>5,706,309</b>
<b>May 2014 Change</b>									
<b>PMB</b>									
<b>Change to PMB</b>	<b>0</b>	<b>-835</b>	<b>93</b>	<b>4,300</b>	<b>-77</b>	<b>-5,214</b>	<b>-1,734</b>	<b>-1,734</b>	<b>-1,734</b>
<b>MR</b>									
<b>Change to MR</b>	<b>0</b>	<b>-1,748</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1,748</b>	<b>-1,748</b>	<b>-1,748</b>
<b>Fee</b>									
<b>Change to Fee</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Change</b>	<b>0</b>	<b>-2,583</b>	<b>93</b>	<b>4,300</b>	<b>-77</b>	<b>-5,214</b>	<b>-3,482</b>	<b>-3,482</b>	<b>-3,482</b>
<b>May 2014 Estimate</b>									
PMB	3,391,477	389,148	434,727	430,276	373,206	377,396	2,004,753	5,396,230	5,396,230
MR	0	1,952	7,250	21,000	21,000	26,885	78,087	78,087	78,087
Fee	155,504	14,325	13,480	19,800	8,800	16,600	73,005	228,509	228,509
<b>Total</b>	<b>3,546,981</b>	<b>405,425</b>	<b>455,458</b>	<b>471,076</b>	<b>403,006</b>	<b>420,881</b>	<b>2,155,846</b>	<b>5,702,827</b>	<b>5,702,827</b>

**Changes to/Utilization of Management Reserve in May 2014**

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
<b>April 2014 MR Totals</b>								
RL-0011	0	1,800	3,000	8,000	8,000	0	20,800	20,800
RL-0012	0	0	2,000	3,000	5,000	3,897	13,897	13,897
RL-0013	0	500	500	2,000	800	6,500	10,300	10,300
RL-0030	0	750	1,000	3,000	2,500	5,388	12,638	12,638
RL-0040	0	300	400	1,500	1,800	4,000	8,000	8,000
RL-0041	0	300	300	3,450	2,800	7,000	13,850	13,850
RL-0042	0	50	50	50	100	100	350	350
<b>Total</b>	<b>0</b>	<b>3,700</b>	<b>7,250</b>	<b>21,000</b>	<b>21,000</b>	<b>26,885</b>	<b>79,835</b>	<b>79,835</b>
<b>May 2014 MR Changes/Utilization</b>								
<b>RL-0011</b>	0	-1,748	0	0	0	0	-1,748	-1,748
<b>RL-0012</b>	0	0	0	0	0	0	0	0
<b>RL-0013</b>	0	0	0	0	0	0	0	0
<b>RL-0030</b>	0	0	0	0	0	0	0	0
<b>RL-0040</b>	0	0	0	0	0	0	0	0
<b>RL-0041</b>	0	0	0	0	0	0	0	0
<b>RL-0042</b>	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>-1,748</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1,748</b>	<b>-1,748</b>
<b>May 2014 MR Totals</b>								
RL-0011	0	52	3,000	8,000	8,000	0	19,052	19,052
RL-0012	0	0	2,000	3,000	5,000	3,897	13,897	13,897
RL-0013	0	500	500	2,000	800	6,500	10,300	10,300
RL-0030	0	750	1,000	3,000	2,500	5,388	12,638	12,638
RL-0040	0	300	400	1,500	1,800	4,000	8,000	8,000
RL-0041	0	300	300	3,450	2,800	7,000	13,850	13,850
RL-0042	0	50	50	50	100	100	350	350
<b>Total</b>	<b>0</b>	<b>1,952</b>	<b>7,250</b>	<b>21,000</b>	<b>21,000</b>	<b>26,885</b>	<b>78,087</b>	<b>78,087</b>

## 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 10/1/2008 -5/31/2014				Projection to FY2018	
Reporting Category				Planned Subcontracting:	\$2,406,850,560
	\$ Value	%	Goal %	Contract-to-date awards:	\$2,092,462,652
				Bal remaining to award:	\$314,387,908
				Goal award\$	Bal to Goal
SB	\$1,040,083,318	49.71%	49.3%	\$1,186,577,326	\$146,494,008
SDB	\$181,641,808	8.68%	8.2%	\$197,361,746	\$15,719,938
SWOB	\$202,053,998	9.66%	7.5%	\$180,513,792	-\$21,540,206
HUB	\$33,342,017	1.59%	2.2%	\$52,950,712	\$19,608,695
VOSB	\$121,198,631	5.79%	3.5%	\$84,239,770	-\$36,958,861
SDVO	\$56,983,161	2.72%	1.3%	\$31,289,057	-\$25,694,104
NAB	\$30,079,392	1.44%	N/A		
Large	\$563,624,638	26.94%	N/A	PRC clause H.20 small business requirement ≥ 17% of total Contract Price performed by SB.	
GOVT	\$2,166,121	0.10%	N/A	Total Contract (mod 329):	\$5,696,818,974
GOVT CONT	\$482,866,522	23.08%	N/A	17% rqmt:	\$968,459,226
EDUCATION	\$91,746	0.00%	N/A	SB actual:	\$1,040,083,318
NONPROFIT_	\$3,410,946	0.16%	N/A		
FOREIGN	\$219,361	0.01%	N/A		
<b>Total</b>	<b>\$2,092,462,652</b>	<b>100.00%</b>	<b>N/A</b>	<b>Bal to rqmt</b>	<b>-\$71,624,093</b>

### Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.09B in goods and services with over 49.7 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
<b>CONTRACT</b>			
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 Carlsbad Field Office.	Ongoing

# Section A

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



**J. M. Swartz**  
Vice President for  
PFP Closure Project

May 2014  
CHPRC-2014-05, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

The Plutonium Finishing Plant (PFP) Closure Project continues to maintain PFP facilities compliant with authorization agreement requirements.

The project has recently finished a revision of the field execution schedule to assist the project in better execution to the Performance Measurement Baseline. As part of this effort Metrics are under development and will be rolled out in July.

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
Glovebox/ Hood Removed or Dispositioned in Place	2	204 gloveboxes/hoods
KPP Rooms/Areas Ready for Demo	-	60 rooms/areas
Asbestos/ACM Removed	-	17,491 feet
Process Vacuum Piping Dispositioned	-	2,545 feet
Process Transfer Line Dispositioned	-	1,153 feet
Pencil Tank Units Removed	-	130 pencil tank units
Buildings Ready for Demo	-	32 structures
Buildings Demolished or Removed	-	32 structures
Non-radioactive Waste Shipped	-	42 m <sup>3</sup>
TRU/TRU-M Shipped	16 m <sup>3</sup>	1,357 m <sup>3</sup>
LLW/MLLW Shipped	62 m <sup>3</sup>	4,598 m <sup>3</sup>

Removal of plutonium-contaminated process equipment continued, with a particular focus on removing gloveboxes, associated piping, and ductwork. During the month of May HA-7A and HC-4 gloveboxes were removed from E4 ventilation awaiting final disposition. The total gloveboxes removed to date is now at 87 percent complete.

- Separated HA-7A glovebox from E4 ventilation leaving one glovebox remaining on E4 ventilation on Remote Mechanical "A" (RMA) line.
- Removed glovebox conveyor sections HC-5A and HC-5B from Remote Mechanical "C" (RMC) line.
- Separated HC-4 from E4 ventilation and cocooned for safe storage awaiting demolition.
- Completed decontamination of 236-Z Miscellaneous Treatment (MT) Gloveboxes MT-4, MT-6, and the Conveyor Glovebox
- Completed cleanout of 236-Z First Floor West Gallery Glovebox
- Completed Phase I training on new Breathing Air (PreMaire) System to support entries into the 242-Z Facility.

## EMS Objectives and Target Status

Objective #	Objective	Targets	Actions to Achieve Targets	Due Date	Status
14-EMS-PFP-OB2-T1	Establish/verify NESHAP compliance under CERCLA for a major emissions unit	Provide basis for minimum requirements based on lesson learned from the Federal Government shutdown and NESHAP compliance matrix for 291-Z-1 stack under CERCLA	Obtain current DOH inspection check list and determine applicability to 291-Z-1	12/31/13	Completed 12/19/13
			Combine applicable parts of past air license compliance matrix and internal NESHAP inspection checklist	3/31/14	Completed 3/31/14
			Develop a basis for minimum required maintenance activities for 291-Z-1 and incorporate into document from action #2.	6/30/14	On schedule
			Obtain concurrence from Central EP&SP	9/30/14	On schedule
14-EMS-PFP-OB1-T1	Demonstrate compliance with all asbestos requirements that are pertinent to PFP	Establish a defensible and conservative asbestos compliance program at PFP that will stand up to the scrutiny of federal, state and local regulators	Review & comment on development of the new CHPRC level asbestos Regulatory Analysis Memorandum (CERCLA based).	12/12/13	Completed 12/12/13
			Review & comment on the modification of an existing asbestos characterization plan Desk Instruction (DI)	1/31/14	Completed 2/24/14
			ECO asbestos requirements education and training.	7/31/14	On schedule

## TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	5	N/A
First Aid Cases	6	61	<ul style="list-style-type: none"> <li>• 5/2/14 – Individual hit right elbow on probe resulting in a strain (23385)</li> <li>• 5/12/14 – Employee notified manager his left wrist was sore, cause identified as repetitive motion (23391)</li> <li>• 5/15/14 – Employee scraped right hand on metal conduit and suffered an abrasion (23394)</li> <li>• 5/20/14 – Employee was bitten or stung on left thigh (23396)</li> <li>• 5/22/14 – Employee had pain in right arm/elbow caused by repetitive motion/cumulative trauma disorder (23397)</li> <li>• 5/27/14 – Employee was diagnosed with a rash on both legs after wearing scrubs (23399)</li> </ul>
Near Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

### 11.02 Maintain Safe & Compliant PFP

- Responded to initial RL Nuclear Services Division (NSD) comments on the DSA/TSR 291-Z exhaust fan enhanced maintenance plan changes that were submitted in March 2014.
- During the month of May, testing on the instrument air compressors was completed and they were put in operation mode.

### 11.05 Disposition PFP Facility

#### 242-Z

- Completed Phase I training on new Breathing Air (PreMaire) System to support entries into the 242-Z Facility

#### RMA

- Separated HA-7A glovebox from E4 ventilation.
- Painted top interior level of HA-9A and prepped for separation from E4 ventilation.

#### RMC

- Removed remaining internal equipment, wiped down, and painted interior of HC-5A and HC-5B.
- Chipped grout around HC-5A removing the glovebox conveyor section from wall.
- Separated HC-5B from main HC-5 conveyor and handed off to PFP Waste Operations (WO) for disposal.

**Backside Rooms**

- Removed remaining internal processing equipment and painted HC-4 glovebox. Removed HC-4 from E4 ventilation, placed on lift table, and cocooned for safe storage until disposal egress route is available.

**236-Z Plutonium Reclamation Facility (PRF)**

- Miscellaneous Treatment (MT) Gloveboxes
  - Completed decontamination of MT-4, MT-6 Gloveboxes, and Conveyor Glovebox
- Gallery Gloveboxes
  - Completed cleanout of First Floor West Gallery Glovebox

## MAJOR ISSUES

**Issue – Hazards associated with utilization of a foaming agent for fixing contamination in gloveboxes result in an exothermic reaction that could cause a self-ignition** - When polyurethane foams react, the result is in an exothermic reaction that could cause a self-ignition. To understand the potential impacts of fire concerns, two densities of fire retardant foam were evaluated (2lb; 6lb) at Southwest Research Institute (SWRI). The Hughes Associates Inc. (HAI) report recommended that a single large volume pour test be performed to fully understand the potential for self-ignition events. CHPRC/PFP has determined that this test is not necessary.

The following, not related directly to the exothermic reaction, are general fire concerns:

1. The foam products tested represent a significant fire hazard. Even with the fire retardants added, the foam will be consumed in a fire event. The HAI report recommended that foamed gloveboxes be protected from exposure fire with non-combustible materials.
2. In addition to the fire hazard, the foam products produce a significant quantity of soot when burned. Will need to re-evaluate the soot loading calculations and incorporate information into the FHA and DSA. This calculation derives the required number of on-line HEPA filter rooms.
3. As a result of the HAI report, RL is recommending that other, non-combustible products be evaluated.

**Corrective Action** – PFP will evaluate HAI recommendations and will also ensure to follow the manufacturer's procedures to safely deploy foam in lifts that are  $\leq 18''$  in rise and allow subsequent cure times between lifts. PFP will also monitor the exothermic reactions during the second mockup demonstration conducted at ERDF. Alternatives analysis will be based on the results and conclusions of the Hazards Analysis. PFP will also evaluate additional alternate foaming agents to reduce the concerns with off gases and exothermic reaction that could cause a self-ignition.

**Status** – During the month of May, the Initiative to implement capabilities to foam components within 234-5Z, 242-Z, and 236-Z progressed.

- Completed final comment disposition on draft FHA revision.
- Completed evaluation of vendor proposals for foam demonstration. Established contract with one vendor to place 2 different foams into our mock up glovebox in June.
- Completed modification to our mock up glovebox and applied internal fixative application. Glovebox is ready for demonstration pour in June.

**Issue** – The existing DSA does not address physical demolition of PFP facilities or leaving high hold-up items in-place for targeted excision during the demolition phase.

**Corrective Action** – Assemble a team of nuclear safety professionals to develop step out conditions and criteria for the existing facility safety systems. Effort will culminate in a revision to the PFP DSA for the final deactivation and demolition phases of the mission.

**Status** – Team for initial training has been assembled and has begun evaluating material form and distribution aspects of accident scenarios, as necessary for developing more accurate and reasonable accident consequences.

- Completed draft Safety Basis Approach and Planning Document
- Completed draft DSA Criteria Document – Submitted to DOE for Concurrence
- Finalized D&D Strategy and Sequencing to support Accident Analysis
- Reviewed Fire Hazards Analysis and returned to Contractor for comment incorporation

**Issue – PFP Stop Work Issue on work involving the mechanical cutting of piping, tanks, or ducts -** While using a porta-band to size reduce a demister line in a glove bag, employees heard a bang and saw an orange-reddish flame flash out the open end of the pipe. There were no signs of damage to the pipe or to the bag; no indications of airborne radioactivity on area CAMs and post job surveys did not detect any spread of contamination. Work packages which have similar demister pipe removal activities were immediately suspended pending investigation and incorporation of possible corrective actions.

**Corrective Action** - A sampling plan is being developed to collect material from inside the bag, collect vapor samples from the demister tank and associated piping, and collection of video and pictures from inside the piping will be sent to either off-site or 222S labs for analysis. In addition, a PhD chemist has been contracted to assist the project in understanding why and how this happened.

**Status** - The glove bag has remained intact since the incident, and there are no signs of damage or degradation to the glove bag. There have been no indications of airborne radioactivity on area CAMs, and post job surveys did not detect any spread of contamination. The condition remains stable, and the glove bag is still being drawn on by ventilation and is maintained under negative pressure. The sampling team collected gas samples from the glove bag and sent them to an off-site laboratory for testing. Liquid samples from the piping and demister tank were taken and were sent for testing and analysis at the 222S Laboratory at Hanford. As results are received, communication will be made to the work force and steps will be taken to step out of the stop work condition.

### RISK MANAGEMENT STATUS

Unassigned Risk  
Risk Passed  
New Risk  
Change

Working - No Concerns  
 Working - Concern  
 Working - Critical

Increased Confidence  
 No Change  
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-011/WBS 011</b>				
<b>Overarching PFP Risks</b>				
PFP-009: Aging Building Systems/Components Problems Impact Planned D&D Activities	Included life extension upgrades as part of FY-14 Annual Baseline Update and include HEPA filter replacement, replacement of air compressors, and electrical switchgear upgrades. Perform critical system reliability assessments; maintenance practices; procure critical spares, and maintain existing redundancies.			Teams finished EMP Rev.1 actions and the submittal letter was sent over to DOE by the March 2014 due date. Maintenance activities will continue to be performed to keep the facility in a safe and compliant configuration until such time as the MAR has been removed and the DSA back-out plan has been implemented.
PFP-062: Ability to Use Permafix Northwest for Glovebox Size Reduction	In the event of Perma-Fix Northwest closing PFP is continuing to evaluate the appropriate team sizes to perform size reduction efforts. In addition PFP will continue to work with CWC for long term storage capabilities.			In the event RL delays off-site shipments to PFW, PFP will ship to CWC using the approved HNF-0063 Exception letter. However the exception only allows a 6 month hold time until CWC would have to ship to PFW.
PFP-080 – Unforeseen Chemical Hazards	CHPRC completed investigations and identified potential lines that contain chemical hazards. CHPRC believes this to be an imminent safety hazard and, as such, has and continues to take actions to mitigate the immediate hazard. Continue to collect data and take photographs to document actions and conditions.			Notice of Change letter transmitted to DOE on February 13, 2013. Investigation completed in the month of March, 2013. The path forward, based on investigation results, has been integrated into the field schedule to mitigate hazards to workers. Issues Change Order 240, Mitigation of Chemical Lines at PFP was received by CHPRC on October 7, 2013 with a limitation not to exceed \$500K prior to the definitization of the change. A formal change proposal has been developed, formally submitted to RL and discussions are ongoing with RL on the definitization of the change.
PFP- 079 – Extend Respiratory Protection Time & Operating Efficiencies	Establishing expectations and behaviors that streamline the shift/pre-job briefings, dress/undress times to allow for additional on-tool time and achieve 2-entries per day. Monitor stay-times and work patterns to establish efficiency increases to 2.5 hours per entry. Achieve consistency in work package preparation to minimize down-time.			Negotiations were successful to extend respiratory protection time with the ratification of the Collective Bargaining Agreement effective November 11, 2013. The PFP project has implemented extended dives since implementation of the agreement, and longer stay times in the field are being realized. Continue to implement Breakthrough Initiative #1, Tool Time actions. A recent VE study for PFP was held and planning continues with a special project team to implement actions to accomplish the new vision for the D&D path forward.
PFP-083: System Back-Out Plan Implementation Extends Schedule	Identify Back-out Plan implementation activities, durations, logic ties, and resources; and integrate these activities in the project execution schedule. Work activities may be re-sequenced to minimize impacts to the critical path schedule. Where needed, utilize subcontractors with credibility and experience for analysis and document preparation support. Work closely with DOE-RL and Regulators to identify review points to streamline approval process and reduce approval turnaround durations.			Finalization of the back-out planning efforts have been completed and incorporated into the field execution schedule to assist the project in better execution to the Performance Measurement Baseline.

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-011/WBS 011</b>				
PFP-089: OPP: 4X10 Shift Schedule	Extending the work day to 10 hours and strict adherence to allotted ARA entry times, allows for two 3.5 hour ARA entries per day on powered air purifying hood respirators (PAPR) and two 2.5 hour and a third 1.5 hour ARA entries per day wearing a tight fitting face piece respirator. 80% of facility ARA work is performed on PAPR respiratory protection equipment. Fully implemented, this tactic provides 4 additional hours of ARA work each day while wearing PAPRs. Extrapolated over a two week period, this opportunity represents 29 additional ARA hours in PAPR over the baseline. Similarly, this opportunity represents 25 additional ARA work hours every two weeks over the baseline.			On February 3, 2014, PFP implemented the 4X10 shift schedule and efficiencies are being tracked and monitored via current reporting tools.
PFP-086: Alternate/Temporary System Capabilities Required Prior to Building Demolition	Management Reserves may be required to acquire equipment and services to provide the required alternate temporary facility system services and functions during demolition preparation. Identify MAR that may remain and identify CHPRC and DOE decision points to deactivate ventilation and fire systems. Evaluate air flow and required air changes to minimize contamination spread and establish air flow utilizing existing ducting to the extent practical with air movers and HEPA filtration through existing stack and monitoring.			Alternate temporary facility system services and functions beyond those currently planned may be required to support building demolition. Currently identifying MAR that may remain and identifying CHPRC and DOE decision points to deactivate ventilation and fire systems. Evaluating air flow and required air changes to minimize contamination spread and establish air flow utilizing existing ducting to the extent practical with air movers and HEPA filtration through existing stack and monitoring
PFP-091: Approval of DSA Revisions	A team of professionals is being assembled to develop the DSA revision to support open air demolition of a Haz Cat II PFP. This effort will be managed as an independent project from PFP daily activities. A partnering approach will be established with RL SMEs and management to expedite the effort and flush out concerns or obstacles early on. This risk is a bounding assumption associated with completion of PFP to Slab-On-Grade.			Staff is in place to support development of two DSA revisions. The annual update is planned for submittal early June. Revision 12 to the DSA is planned for submittal to RL for approval in November, 2014.
PFP-092: Increased Characterization	Events at the facility may increase the need for characterization above what is planned for cost and schedule.			The alternate technical approach assumes more duct work may be left in place for demolition. In order to implement the alternate technical approach, a more comprehensive characterization of 234-5Z than currently planned is required prior to demolition of the facility. Additional coupon sampling is required to provide more accurate data than the previously used, more conservative historical data, and to decrease the level of uncertainty of final results. Improved accuracy and reduced uncertainty in characterization results is required to enable justification of leaving more duct work in place prior to demolition. A BCR (BCR-011-14-003R0) was implemented in the month of May to include this new technical approach.

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-011/WBS 011</b>				
PFP-074: Unexpected Configuration/Conditions	Unexpected facility configuration or site conditions are encountered during Cold & Dark, or demolition activities.			In the month of April the project realized this risk while using a porta-band to size reduce a demister line in a glove bag, employees heard a bang and saw an orange-reddish flame flash out the open end of the pipe. There were no signs of damage to the pipe or to the bag, no indications of airborne radioactivity on area CAMs, and post job surveys did not detect any spread of contamination. Work packages which have similar demister pipe removal activities were immediately suspended pending investigation and incorporation of possible corrective actions. The stop work remains in effect for all work involving mechanical cutting of piping, ducting, and tanks. Results of the sampling analysis and a path forward for the stop work will be communicated as soon as results are received. A Notice of Change has been submitted to DOE for their consideration.
<b>242-Z Risks</b>				
PFP-242-04: Dose Rates in 242-Z are Higher Than Planned	Characterization is built into the baseline to perform characterization including dose rate maps. The characterization plan will be utilized in work planning efforts to place temporary shielding around higher dose rate components. The work team is trained to stop work when conditions exceed planning information. This will prevent overexposure and prolonged work stoppages. However, if work is stopped, an alternate plan will need to be developed. Minimal mitigation is available for unknown/newly discovered higher than planned dose rates.			242-Z Teams are being compiled and are working on work package development and field work prep activities to enable a smooth transition when field work is planned to start.
PFP-242-05: RM 134 Modifications for size reduction & load out from 242-Z are not authorized	Develop the air-flow, fire protection, and structural requirements during the planning stage to allow for the wall between 242-Z and 234-5Z to be removed. Execute the demolition in accordance with the plan. Identify response team to respond to discoveries proactively to maintain progress.			Working with field teams to develop more efficient and less intrusive direct waste load out capabilities.
PFP-242-06: More RH-TRU than Planned from 242-Z	Utilize results from radiological and analytical characterization to develop size reduction plans. Work with the waste packaging and characterization group to understand requirements for RH-TRU waste and packaging techniques to minimize RH-TRU waste.			242-Z Teams are being compiled and are working on work package development and field work prep activities to enable a smooth transition when field work is planned to start.
<b>291-Z Risks</b>				
PFP-291-01: 291-Z Characterization Unknowns	Develop characterization plans and objectives. Review historical documentation of facility construction and accident event reports. Incorporate characterization information into facility work plans and execution documents.			Opportunities are being evaluated to characterize early during maintenance activities which result in allowance of some of the operating fans to be shut down. The plan of the week/day will be the communication tool to determine when early characterization can be conducted.

Balance of Plant Decontamination/Decommissioning Risks				
PFP-BOP-01: More Extensive Cleanout/Decon Required	Develop and implement a more detailed process facility characterization plan. Determine and obtain approval for ready-for-demolition criteria (contamination removal/cleanup endpoints prior to building demolition). Early characterization provides an opportunity to avoid project schedule impact. Identify approvals required and quantities/materials that may be exempted from removal (i.e. floor tiles, transite, electrical, etc.).			During the month of May, characterization efforts continued in the duct level following the sampling plan as developed by the Environmental Director at PFP. A BCR was developed and implemented in the month of May to address in-scope unplanned work resulting from recognition of this risk associated with the need for increased characterization efforts beyond those identified in the PMB as submitted in October, 2013.
PFP-BOP-02: Overall D4 Schedule Impacts From Interferences Between Sub-projects	The facility has developed an integrated priority list for all in-plant activities for resource assignment in accordance with priority. PFP has developed team communication meetings to prioritize resources on a daily basis. External facility resources are prioritized through MSA between PRC subprojects. These techniques ensure the resources are assigned to the highest priority work. Identify new D&D field teams to conduct Walkdowns and Workpackage development to improve interfaces within subprojects.			Evaluation of additional field teams to start work in the duct level continued through the month of May. To mitigate schedule slippage characterization efforts are under way for E4 ducting/Filterboxes to determine waste disposition paths. In addition, field team sizes will continue to be evaluated to ensure resources are available when needed to support the duct level work efforts when glovebox removal activities are complete.  A BCR (BCR-011-14-003R0) was implemented in the month of May to include area approach vs. system approach. It is expected that a new technical approach for 234-5Z basement will be implemented into the baseline via the BCR process in August, 2014.
PFP Demolition Risks				
PFP-DEMO-02: Air Modeling Increases Equipment Removal/Decontamination for Demo	Work with the CHPRC environmental to ensure that an understanding of equipment, components, and residual material criterion are understood and bounded for air modeling. Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned. Develop and implement plans to document criterion are met.			The current air modeling plan is based on assumptions of what the facility conditions may be at the time before demolition. Characterization activities that are and will be performed will provide actual data that will be used in the model. Based on the model results, the project will make adjustments to its demolition approach. Field characterization survey plans are currently under development. A characterization survey plan has been developed for PFP ventilation, and field characterization of E4 ducting is under way. As resources allow, more characterization unit survey plans will be developed and added to work packages.
PFP-DEMO-08: Experienced Demolition Crews	Initiate demo planning early to establish contracting mechanisms at least one year prior to the need to begin demolition activities in order to have contracts in place to meet schedule. Complete more detailed facility characterization to support needed contract statement of work.			The full complement of D&D workers to support the PFP project will arrive on project by August, 2014. CHPRC is evaluating follow-on scope to keep the D&D work force on staff to ensure that the PFP will be able to be demolished as scheduled by September, 2016.  D&D workers are intermittently arriving on the project. All requisitions are expected to be filled and individuals on project no later than July 7, 2014.
PFP-DEMO-18: ORR Required for PFP D4	The readiness activities schedule in the baseline is appropriate for the risk and complexity of the PFP & PRF demolition. Ongoing discussions will be conducted with DOE and DNFSB as required within the quarterly startup notification process. Additional resources may be added for preparation and review teams.			PFP efforts to upgrade the DSA to establish requisite conditions for the deactivation of vital safety systems, evaluate the unique hazards associated with the demolition phase of the project, and establish the commensurate control set for the remaining mission will validate the appropriateness of a readiness assessment versus Operational Readiness Review (ORR).
PRF Cleanout/Decontamination Risks				
PFP-PRF-01: PRF Canyon Cleanout Scope Increases	Characterization data will be collected as early as feasible to allow early identification of any issues associated with the planned approach. Failure to achieve end-point criteria to support open air demolition is a basis for Change Request to DOE.			The Characterization strategy is currently under development and meetings have been held with project managers to finalize the approach. Efforts are continuing to further define ready-for-demolition criteria for the PRF Facility as it is assumed to be the most challenging to achieve the milestone of slab on grade by 9/30/16.

<p>PFPP-PRF-02: PRF Canyon Crane Reliability Issues Result in Cost/Schedule Growth</p>	<p>Perform necessary preventative maintenance actions associated with canyon crane and ensure appropriate spares are on site to minimize schedule impacts in the event of equipment failure. Minimize the use of the crane to the extent practical. Obtain independent assessments of the crane. In the event of a crane failure, attempt to utilize work force on other projects to minimize down-time for work force.</p>			<p>The PRF canyon crane is in service and pencil tank size reduction activities are continuing.</p>
<p>PFPP-PRF-21: OPP: 236-Z Floor/Pan Grouting</p>	<p>Following pencil tank removal, the PRF canyon floor will be vacuumed and wiped down. After completing that activity, the floor will be grouted to cover the pans and create a level working surface. From the grouted floor, residual canyon cleanout and wall decontamination will be performed. Upon completion of canyon cleanout, another grout cap will be placed to secure any residual contamination remaining on the floor prior to demolition. This approach eliminates the effort to remove the stainless steel pans from the slab (a process that would damage the slab according to engineering analysis), reduces contamination levels on the floor, correspondingly improving efficiency of manned entries for other canyon decontamination and cleanout efforts, and stabilizes floor contamination from a criticality and contaminant dispersion perspective.</p>			<p>This is work that will be performed in FY2015.</p> <p>In preparation, a grouting concept will need to be developed and a grout specification will need to be prepared. This activity will require a revised CSER calculation and DSA USQ evaluation. A Plant Force Work Review (PFWR) will be processed. A grouting Contract SOW, RFP, Bid Evaluation, and award will be issued. Grout procurement and grout conveyance equipment RFPs, Bid Evaluations, and awards will be issued. A grout testing contract SOW, RFP, Bid Evaluation, and award will be issued. Work Packages will be prepared. Conveyance equipment will be installed. Grout will be delivered, tested and pumped.</p>
<p><b>RMA/RMC Glove Box Removal Risks</b></p>				
<p>OPPORTUNITY: PFPP-GB-01A: High Gram Box Disposition - FOAM</p>	<p>The responsibility for the implementation on the use of expanding foam at PFP has been assigned to personnel within the PFP Special Projects organization and is essentially being managed as a project. Lessons learned from other DOE sites that have used expanding polyurethane foam for similar applications are being used to facilitate implementation at PFP. The Risk Evaluation Board (REB) will be used to employ senior management personnel from CHPRC and DOE-RL to help resolve any significant issues associated with the use of foam.</p>			<p>Efforts continue under the special projects organization to implement the foaming initiative to foam selected components throughout 234-5Z and 236-Z. In the month of December the project determined that an additional evaluation will be conducted to determine alternate foaming agents due to the fire analysis that was performed on desired foaming agent.</p> <p>In the month of February alternate foaming agents were received and testing/documentation of results are pending.</p> <p>The Statement of Work (SOW) has been revised and contract awarded to an offsite vendor to perform mock-up testing late June.</p>
<p>PFPP-GB-02: Glove boxes Isolation/Internal Strip out takes longer than planned</p>	<p>Utilize existing drawings, tools and techniques for equipment removal. Gram loading/NDA of gloveboxes has been obtained. Perform additional NDA to determine location of holdup. Perform surgical extraction of high gram items. Evaluate the use of foam or other fixatives to expedite cleanout.</p>			<p>Continue to work with field teams to plan upcoming isolations on remaining gloveboxes.</p>

## 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	10.9	8.7	9.2	(2.2)	-20.4%	(0.5)	-5.2%

Numbers are rounded to the nearest \$0.1M

#### CM Schedule Variance: (-\$2.2M/-20.4%)

Current Month unfavorable schedule variance is due to re-sequencing work in the 242-Z Americium Facility, to align with the availability of D&D workers delaying preparations and initial entry activities in support of 242-Z. The 234-5Z duct level work has been re-planned to align with an area vs. system approach and a change in the PFP demolition sequence changing the need for work in the duct level to start later in the Fiscal Year. Resource availability to support work efforts in the 236-Z facility have been impacted as a result of unanticipated attrition of RCT and NCO's lamping on positions to support other Hanford Contractors, and since April 21, 2014 no pencil tank size reduction has been performed due to a stop work order placed on all mechanical cutting of piping, tanks, and ducts.. Apportioned activities in the D&D Project Support account that align with the delays in discrete D&D work scope, primarily balance of 234-5Z work scope are also contributing to this variance. Partially offset by completing behind schedule work in 234-5Z RMA/RMC lines and eliminating the need for size reduction efforts on the HA-7A glovebox due to final NDA results allowing ability to ship glovebox in its current state to PemaFix Northwest for final disposition.

#### CM Cost Variance: (-\$0.5M/-5.2%)

The current month unfavorable cost variance is within reporting thresholds.

## 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	693.3	668.2	702.2	(25.2)	-3.6%	(33.9)	-5.1%	935.4	963.9	(28.6)

Numbers are rounded to the nearest \$0.1M

#### CTD Schedule Variance (-\$25.2M/-3.6%)

The Schedule Variance is within reporting thresholds.

#### CTD Cost Variance (-\$33.9M/-5.1%)

The Cost Variance is within reporting thresholds.

#### Variance at Completion (-\$28.6M/-3.1%)

The Variance at Completion is primarily a result of FY2013 Sequestration impacts to D&D work scope and prior year unrecoverable costs. The project is advancing a strategic path forward to achieve the slab-

on-grade completion date of 2016.

**Contract Performance Report Formats are provided in Appendix A.**

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

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2014		
	Projected Funding	Spending Forecast	Spend Variance
RL-0011	106.9	103.9	3.1

Numbers are rounded to the nearest \$0.1M

### Funds/Variance Analysis

Projected Funding remained at \$106.9M. The spending forecast was reduced from \$104.6M to \$103.9M due to resource and material adjustments.

### Critical Path Schedule

The PFP critical path runs through size reduction of the Plutonium Reclamation Facility (PRF) Pencil Tanks, Decontaminating/Scabbling/Fixing the PRF Canyon, Prepping the Gallery Gloveboxes and turning PRF into a Cold & Dark facility. This achieves completion of the M-083-44A TPA – *Complete Transition of 234-5Z & ZA/243-Z/291-1 & 291-Z Facilities* – and kicks off demolition of the 242-Z/242-ZA and 236-Z facilities leading to completion of the final TPA milestone – M-083-00A, *PFP Facility Transition and Selection Disposition Activities*.

### Baseline Change Requests

BCR-011-14-003R0 - *Incorporation of Alternate Technical Approach*

BCRA-PRC-14-016R0 - *HPIC Updates*

BCR-PRC-14-010R0 - *Incorporate NTE for CO #248, Implementation of DOE-0342, Rev 2A, Hanford Site Chronic Beryllium Disease Prevention Program*

## MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-44A	Complete Transition of 234-5Z and ZA/243-Z/291-I & 291-Z Facilities	09/30/15		10/24/16	This Tri-Party Agreement completion has been impacted by sequestration and annual funding limitations. It is currently unattainable.
M-083-00A	PFP Facility Transition and Selection Disposition Activities	09/30/16		12/05/16	This Tri-Party Agreement completion is at risk of meeting the 9/30/16 commitment date.

## 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)



**L. T. Blackford**  
Vice President and  
Project Manager for  
Decommissioning, Waste,  
Fuels, and Remediation  
Services (DWF&RS)

**May 2014**  
CHPRC-2014-05, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

- The Nuclear Safety and Performance Evaluation Board (NSPEB) completed the evaluation of the STP, 100K, and CPS&M Organizations. A factual accuracy check of the report was conducted and returned to the NSPEB team and the final report was issued May 8, 2014.
- Engineered Container Retrieval and Transport System (ECRTS):
  - o Members of the STP Team met with the DNFSB Staff and RL to provide a briefing on ECRTS Nuclear Safety Initiatives and the status of those efforts. Presentations were provided on sludge layering (blending), passive ventilation, and spray leak analysis. The attendees were also provided a tour of the 105KW Basin and adjacent Annex as well as the Maintenance and Storage Facility (MASF) Test Facility.
  - o The STP technical staff continued developing engineering and nuclear safety documentation supporting implementation of alternative strategies to simplify the ECRTS process system design and operation. Once the engineering and nuclear safety documentation is updated, a revision of the Preliminary Design Safety Analysis (PDSA) will be submitted to RL, currently targeted for late this fiscal year.
  - o A life-cycle cost-benefit analysis for blending sludge streams was presented to RL on May 5, 2014. RL provided positive verbal feedback and will formally document their authorization for blending when approving the updated PDSA in FY2015.
  - o Development of the three process improvement initiatives continued. The approved revision to the spray leak methodology has been incorporated into the draft accident analysis, which supports the update to the PDSA. Preliminary analysis for passive ventilation indicates that this change to the hydrogen management strategy will meet the requirements for controlling hydrogen concentration in a Sludge Transfer and Storage Container (STSC) upon loss of normal process ventilation. Thermal and gas analysis also indicates that layering (blending) sludge from multiple engineered containers (ECs) will meet requirements for transport and storage. All three initiatives are being included in the revised design, PDSA and supporting technical documents. Hazard Analysis, Accident Analysis, and Control Decision documents are being prepared for internal review. The updated PDSA internal review is targeted for July with submittal to RL scheduled for late September. The Safety Design Strategy is also being updated to fully align with the planned revision to the PDSA.
  - o Two ECRTS process equipment fabrication Basic Ordering Agreements (BOAs) have been awarded by CHPRC Contracts. One BOA will be utilized for safety related fabrication and one will be utilized for non-safety related fabrication. Individual contract releases for specific equipment skids will be competitively bid between the contractors within the applicable BOA. Statements of work (SOW) for ECRTS equipment are currently being developed. Equipment is being grouped into approximately 20 separate SOWs. The first SOW for procurement of general service transfer and decant system equipment is currently in the review cycle and is scheduled to be released to the BOA holders with a request for proposal at the end of June.
  - o The Hose-in-Hose Transfer Line (HIHTL) fabrication contract is being restarted to procure the remaining HIHTLs. A proposal has been received from River Bend and technical evaluation is currently underway.
- Integrated Process Optimization Demonstration (IPOD):
  - o Procedure, hardware, and software walk-down of the multiplexer (MUX) control system upgrade to the ECRTS test bed were completed, comments incorporated into the MUX upgrade demonstration scope, and the demonstration commenced on May 5, 2014. This phase of the IPOD is forecast to complete in July. A test report will subsequently be developed and processed through the STP Joint Test Group (JTG). The addition of the mux technology truly makes the

- installation of the ECRTS major equipment skids at 100K Area a “plug-and-play” installation.
- o The MASF team performed prerequisites for the Overfill Recovery Tool (ORT) retest and prepared the IPOD procedure for commencing retrieval of settler simulant. The ORT re-test procedure was completed and approved. The continuation of the IPOD settler retrievals will demonstrate and test the latest design modifications to the STSC decant float arm hinge and to the ORT high pressure spray nozzles. IPOD activities are forecast to be complete in July. A test report will subsequently be developed and processed through the STP Joint Test Group.
  - o Following the settler simulant runs, sand will be loaded into the EC and be retrieved to complete the IPOD activity. During the sand retrieval runs (anticipated to be near the end of July), the ECRTS operations and training staff are slated to observe the runs to better familiarize themselves with the hands-on activities involved with the ECRTS process system such as, STSC receipt preparation, STSC hose connects and disconnects, rad con controls, EC cleanout with retrieval and mobilization tool operations, and transfer/decant control panel operations.
  - Garnet Filter Testing continued. Three test runs with gravel were successfully completed. A dilution water modification is in progress. Demonstration of proof-of-concept activities for inserting video inspection hardware into the garnet filter mockup continued.
  - 105KW Annex Construction
    - o Performed engineering walk down for the verification of structural concrete completion, concrete formwork, and concrete placement for stem wall installation.
    - o Completed erection of steel members for the low bay and intermediate bay (up to the top of High Bay concrete wall) and shipped steel members for the high bay structure to site shop fabrication.
    - o Completed the majority of the field fire coating application of steel members for the installed mezzanine (minor areas to finish upon completion of knife plate and mezzanine kicker installation).
    - o Placed the HEPA stack base into the Low Bay area of the building.
    - o Completed cleanup of the mezzanine steel top flanges to support the installation of the shielding plates, welding to support knife plate installation in the mezzanine, concrete coring to support the mezzanine kicker installation, and installation of the pour stops on the low bay roof.
    - o The factory acceptance test procedure was approved for the Flanders HEPA filter fabrication with a target for testing initiated on June 17, 2014
    - o Initiated the masking for the field fire coating application of steel members for the installed low bay and intermediate bay as well as the previously noted minor area around the completed knife plate installation, installation of the mezzanine shielding plates and grating, and fabrication for the inside stairs, guardrails and catwalk.
    - o The in-basin construction buyback scope planned for FY2014 was awarded to Grant Construction on May 12, 2014. All Facility Modification Permits (FMPs) required for the FY2014 work scope are complete along with the work packages with the exception of one Enhanced Work Planning / Automated Job Hazards Analysis (EWP/AJHA).
  - Four equivalencies for T Plant Design have been prepared and reviewed by CHPRC and include the following deficiencies: lack of sprinklers, egress distances, occupancy separation barriers, and an emergency alarm. CHPRC and the Hanford Fire Department have reviewed the draft equivalencies and provided comments. Comments are being incorporated into the equivalencies and once complete, will be sent to CHPRC and the Hanford Fire Marshall, and then transmitted to RL for formal approval.
  - The 2012 Annual update of the 105KW Basin Final Safety Analysis Report (FSAR) and Technical Safety Requirements (TSR) was implemented on May 22, 2014. The 2013 Annual update is planned to be submitted to RL for approval on June 3, 2014.
  - 100K Minimum Safe Engineering:
    - o Completed a cross-connection control inspection report for the entire site.

- o Discovered that the 142K compressor drier was icing over; troubleshooting the issue will be performed.
- o HVAC-EXHF-8045 motor bearings were observed to be noisy and running hot. The system has been shut down and a work request was completed to initiate a work package for bearing replacement.
- o 189K initiated the fire pump repair. More damage was discovered to the impeller than initially anticipated, a replacement rotating element is in the process of being procured.
- o The 105KE Roof work package document for the repair and foaming of the roof was issued.
- o The 105KW Basin water evaporation white paper and supporting calculation to evaluate and quantify basin water loss, is in the review and approval process. It was concluded that it is unlikely that any small leaks will be detected using this process. However, the existing methodology has the same technical basis as is used by the Nuclear Regulatory Commission (NRC), and no additional investigation is considered necessary.
- o The second quarter FY2014 system health report for the KW-14A transfer bay crane was released.
- o The annual inspection of the 32-ton crane was completed following the replacement of the failed limit switches. The 32-ton crane was placed back into service on May 5, 2014.
- o The monthly basin water loss calculation was completed. This completes the requirement under CP-07-003, *K-Basin Water Loss Rate Calculation*.
- o The revision to the Safety Equipment List (SEL) based on the 2012 annual update to the 105KW Basin TSAR was prepared and in the process of being released. A preventive maintenance review of all the remaining components on the revised SEL from the 2012 annual update to the 105KW Basin SAR was completed.
- o The results of a meggar test by RES on HVAC-STA3 motor indicated that all phases went to ground, which could mean a failed motor. CHPRC will investigate further to verify.
- o During a retest of the 105KW compressor system following the replacement of the pressure relief valve, it was noted that the system was not able to maintain pressure above 40 psi. Further investigation identified potential line leaks downstream of the compressor. A troubleshooting package to walk down the line to identify the leaks is on the schedule.
- o The FMP to remove unused and deactivated equipment from Room 20A, in preparation for ECRTS, was completed and approved.
- o An assessment of the fire protection program implementation at 100K and MASF was completed; this will be followed by an assessment of performance in The Job Control System (JCS).
- o Engineering supported electricians to terminate loose wires near the 60-ton chiller, in preparation for RES to service the chiller and restore it to service.
- o Document Management and Control System (DMCS) change notices were prepared and submitted to resolve incorrect Design Analysis (DA), system, and drawing status.
- o Engineering supported the Hazard Review Board (HRB) for the roof repair at 105KE and prepared a recommendation for repair of the 105KW roof, where high winds earlier this year damaged sections of the roof.
- 100K Operations worked on planning activities associated with motor control center (MCC)/ switchgear outage, garnet filter dosing, Facility Basin Water Sample Transport and Analysis, HVAC preventive and corrective maintenance, debris dosing and relocation, Annual Russian tour – verification of 105KW reactor deactivation. Completed soft waste load-out, warm-weather preparations at 189K Water Plant and 105KW Basin, 32-ton crane limit switch replacement and returned crane to service, cleanup/abatement and clearance sampling of XO Lab for asbestos, Multi-Canister Overpack (MCO) transporter annual maintenance, removed P-6 Skimmer Pump and painted skimmer pump pad, procedure changes to support new facility basin water sample transport and analysis and completed drawing and shipping monthly samples utilizing new process, MCC 1

electrical outage, cleaning and inspection, Beryllium sampling, installation of D Sump run time meter, sand filter block valve replacement, shipped beryllium samples taken from MCC 1, decontamination activities to support skimmer pump replacement work and sand filter block valve replacement. Continued procedure reviews in support of 2012 Safety Basis Implementation, training and qualification of NCO and RCT buy-back resources, support to STP K West Annex and in-basin construction activities, participated in full-up emergency preparedness drill for 100K Area.

## EMS OBJECTIVES AND TARGET STATUS

None currently identified.

### TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	2	9	5/11/14 - Two employees were working to neutralize a solution in a tank. While working with the tanks, the employees smelled a chemical odor. Body part affected: Respiratory ( 23389 & 23388)
Near-Misses	0	0	N/A

### KEY ACCOMPLISHMENTS

- The Nuclear Safety and Performance Evaluation Board (NSPEB) completed the evaluation of the STP, 100K, and CPS&M Organizations. A factual accuracy check of the report was conducted and returned to the NSPEB team and the final report was issued May 8, 2014.
- A life-cycle cost-benefit analysis for blending sludge streams was presented to RL on May 5, 2014. RL provided positive verbal feedback and will formally document their authorization for blending when approving the updated PDSA in FY2015.
- Two ECRTS process equipment fabrication BOAs have been awarded by CHPRC Contracts. One BOA will be utilized for safety related fabrication and one will be utilized for non-safety related fabrication.
- Procedure, hardware, and software walk-down of the multiplexer (MUX) control system upgrade to the ECRTS test bed were completed, comments incorporated into the MUX upgrade demonstration scope, and the demonstration commenced on May 5, 2014.
- The MASF team performed prerequisites for the Overfill Recovery Tool (ORT) retest and prepared the IPOD procedure for commencing retrieval of settler simulant. The ORT re-test procedure was completed and approved.
- Garnet Filter Testing continued. Three test runs with gravel were successfully completed.

- 105KW Annex Construction performed an engineering walk down for the verification of structural concrete completion, concrete formwork, and concrete placement for stem wall installation. Completed erection of steel members for the low bay and intermediate bay (up to the top of High Bay concrete wall) and shipped steel members for the high bay structure to site shop fabrication. Completed the majority of the field fire coating application of steel members for the installed mezzanine (minor areas to finish upon completion of knife plate and mezzanine kicker installation). Placed the HEPA stack base into the Low Bay area of the building. Completed cleanup of the mezzanine steel top flanges to support the installation of the shielding plates, welding to support knife plate installation in the mezzanine, concrete coring to support the mezzanine kicker installation, and installation of the pour stops on the low bay roof. The factory acceptance test procedure was approved for the Flanders HEPA filter fabrication with a target for testing initiated on June 17, 2014. Initiated the masking for the field fire coating application of steel members for the installed low bay and intermediate bay as well as the previously noted minor area around the completed knife plate installation, installation of the mezzanine shielding plates and grating, and fabrication for the inside stairs, guardrails and catwalk.
- The in-basin construction buyback scope planned for FY2014 was awarded to Grant Construction on May 12, 2014. All Facility Modification Permits (FMPs) required for the FY2014 work scope are complete along with the work packages with the exception of one Enhanced Work Planning / Automated Job Hazards Analysis (EWP/AJHA).
- Four equivalencies for T Plant Design have been prepared and reviewed by CHPRC and include the following deficiencies: lack of sprinklers, egress distances, occupancy separation barriers, and an emergency alarm.
- The 2012 Annual update of the 105KW Basin Final Safety Analysis Report (FSAR) and Technical Safety Requirements (TSR) was implemented on May 22, 2014. The 2013 Annual update is planned to be submitted to RL for approval on June 3, 2014.
- 100K Min-Safe Engineering completed a cross-connection control inspection report for the entire site. The second quarter FY2014 system health report for the KW-14A transfer bay crane was released. The annual inspection of the 32-ton crane was completed following the replacement of the failed limit switches. The 32-ton crane was placed back into service on May 5, 2014. The monthly basin water loss calculation was completed. This completes the requirement under CP-07-003, *K-Basin Water Loss Rate Calculation*. The revision to the SEL based on the 2012 annual update to the 105KW Basin TSAR was prepared and in the process of being released. A preventive maintenance review of all the remaining components on the revised SEL from the 2012 annual update to the 105KW Basin SAR was completed. The FMP to remove unused and deactivated equipment from Room 20A, in preparation for ECRTS, was completed and approved. An assessment of the fire protection program implementation at 100K and MASF was completed; this will be followed by an assessment of performance in JCS. DMCS change notices were prepared and submitted to resolve incorrect DA, system, and drawing status. Engineering prepared a recommendation for repair of the 105KW roof, where high winds earlier this year damaged sections of the roof.
- 100K Operations completed soft waste load-out, warm-weather preparations at 189K Water Plant and 105KW Basin, 32-ton crane limit switch replacement and returned crane to service, cleanup/abatement and clearance sampling of XO Lab for asbestos, MCO transporter annual maintenance, removed P-6 Skimmer Pump and painted skimmer pump pad, procedure changes to support new facility basin water sample transport and analysis and completed drawing and shipping monthly samples utilizing new process, MCC 1 electrical outage, cleaning and inspection, Beryllium sampling, installation of D Sump run time meter, sand filter block valve replacement, shipped beryllium samples taken from MCC 1, decontamination activities to support skimmer pump replacement work and sand filter block valve replacement.

## MAJOR ISSUES

None currently identified.

## RISK MANAGEMENT STATUS

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

 Working - No Concerns      Increased Confidence  
 Working - Concern      No Change  
 Working - Critical      Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-0012/WBS 012</b>				
STP-067A: Safety Significant Components  STP-067B – OPPORTUNITY: Safety Classification of SSC's	Integrate nuclear safety representation on design team to minimize potential for an increase in the classification of safety significant SSCs in the ECRTS Process System Design. The project will conduct in-process reviews of the draft PDSA with RL to ensure reviewers fully understand the basis for current SSC safety classifications. The PDSA will be formally submitted to RL in July of 2013. Early procurements of SSC's may be initiated at a higher safety/quality level.			Staff is proceeding with developing engineering and nuclear safety documentation supporting implementation of alternative strategies simplifying ECRTS design and operation.
STP-072: Delayed STSC/ECRTS Procurement & Delivery	Identify qualified vendors up-front, Conduct fabricator on-site inspections, place CHPRC Quality Control staff at the vendor facility, Maintain a prioritized buyback list to initiate early procurements should additional funding be identified, and procure raw materials early to minimize commodity price fluctuations. Develop procurement bundles for equipment that can be prioritized based on funding, vendor availability, and safety documents.			Two ECRTS Process Equipment Fabrication Master Contracts have been awarded. STSC vessel procurement expression of interest request has been posted on the CHPRC Solicitation Website.
STP-111B: Basin ECRTS Installation Contractor/ Subcontractor Performance	Closely coordinate, plan, and monitor construction using detailed field schedules to minimize impacts. Re-train construction personnel on procedures for performing construction activities. Include in baseline budget to cover additional management oversight support for construction, planning, safety and project management to accommodate the potential impacts. Interface between existing organizations will need to be closely coordinated, planned, and monitored. Mitigation strategy is to provide extensive oversight on subcontractors work scope.			In-Basin Construction contract awarded in May.
STP-ANX-020: Contractor/Subcontractor Performance	Mitigation strategy is to provide extensive oversight on subcontractors work scope. Implement a Corrective Action Plan for contractor to implement to address shortfalls in performance. Closely coordinate, plan, and monitor construction using detailed field schedules to minimize impacts.			A Corrective Action plan is in place with the primary construction contractor. CHPRC has increased oversight over the contractor to ensure performance improvements are obtained.
STP-ANX-024: K-Annex Design or Requirements Change or Errors & Omissions	Identify required design changes early in the process to minimize schedule impacts. The design reviews and constructability reviews have been completed, the potential requirements change, and related impacts are accepted without mitigation due to the action required. Develop a streamlined approach for handling contractor submittals and RCIs.			Situation continues to be monitored by the project team.

STP-ANX-028: Annex Acquisition – Programmatic Risk	CHPRC is proceeding with contract strategy for the Annex Construction.	●	↔	CHPRC is preparing a Change Proposal to address the cumulative impacts of sequestration and partial government shutdown for the Annex construction. Sequestration and partial government shutdown actions may have a resulting impact on the Annex Construction contractor outside of the original contract scope for directed stop & restart activities.
--	--	---	---	---

### 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	5.6	5.6	5.6	0.0	0.1%	0.0	0.2%

Numbers are rounded to the nearest \$0.1M

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

Variance is within reporting thresholds.

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

Variance is within reporting thresholds.

### 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	418.5	418.3	427.4	(0.2)	-0.0%	(9.1)	-2.2%	692.6	708.6	(16.0)

Numbers are rounded to the nearest \$0.1M

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

Variance is within reporting thresholds.

**CTD Cost Performance (-\$9.1M/-2.2%)**

Variance is within reporting thresholds.

**Variance at Completion (-\$16.0M/-2.3%)**

The Variance at Completion 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	FY2014		
	Projected Funding	Spending Forecast	Spend Variance
RL-0012	72.2	69.4	2.7

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis

Projected Funding remained at \$72.2M. The spending forecast increased from the prior month as Annex Construction forecast was adjusted to reflect current information on Change Orders and a large labor passback has been incorporated.

### Critical Path Schedule

The STP Critical Path is funding constrained in FY2014 resulting in deferral of process equipment procurement into FY2015/2016. The critical path subsequently flows through the installation of process equipment, then operational acceptance testing of the facility modifications, annex process equipment, readiness activities at the 105KW Facility, the operational readiness review, and finally containerized sludge retrieval operations. Retrieval operations includes 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*.

### Baseline Change Requests

BCR-012-14-003R0 – *Annex Construction Realized Risks*

BCR-PRC-14-011R0 – *Base Year Shift in Support of FY2015 PMB Update*

BCRA-PRC-14-013R0 – *HPIC Updates*

## MILESTONE STATUS

(Tri-Party Agreement) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The PMB Annual Update, implemented in September 2013, and subsequent approved BCRs define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is a one year look ahead of commitments and Tri-Party Agreement enforceable milestones and non-enforceable target due dates. Tri-Party Agreement Milestones are currently being renegotiated between the Parties to align milestone work scope with anticipated FY2014 funding scenarios and Hanford site priorities.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-175	Begin sludge removal from 105KW Fuel Storage Basin	09/30/2014		09/01/2018	This Tri-Party Agreement completion has been impacted by changes in DOE priorities and sequestration. It is currently unattainable and needs to be re-negotiated.

## 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)



**L. T. Blackford**  
Vice President and  
Project Manager for  
Decommissioning, Waste,  
Fuels, and Remediation  
Services (DWF&RS)

May 2014  
CHPRC-2014-05, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

The Waste and Fuels Management Project (W&FMP) continued maintaining 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. Liquid Effluent Facilities (LEF) received 7 tankers, 26.0k gallons. Liquid Effluent Retention Facility (LERF) Basin removed bird nests from the ETF Complex. T Plant repaired 279 of 280 fire barrier penetrations. Canister Storage Building (CSB) continued Multi-Canister Overpack (MCO) monitoring. Central Waste Complex (CWC) covered 39 waste boxes in Central Waste Complex (CWC) outside storage area.

## EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
14-EMS-DWF&RS-OB1-T1	Conserve resources and reduce the generation and/or toxicity of waste at the source.	Continue inspection and management review of material and equipment storage areas at frequencies determined necessary by line management to assure continued protection of property from loss, deterioration, or damage.	9/30/14	On Schedule

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	2	48	<ul style="list-style-type: none"> <li>5/3/14 - Employee reported while performing an instrument source check the worker experienced a slight shock. Body part affected: Hands (23381)</li> <li>5/29/14 – While the employee was walking up a ramp, the wood gave away causing a sprain to left ankle. Body part affected: Foot (23405)</li> </ul>
Near Misses	0	1	N/A

## KEY ACCOMPLISHMENTS

### 13.01 Project Management

- Continued Project Management support for high priority projects
- Continued to work with RL on multiple changes to the contract scope of work. Change Proposal development in process.

### 13.02 Capsule Storage & Disposition

- Completed annual 296-B-10 Stack Sample Probe inspection and PM.
- Performed annual calibration of K2 Supply differential pressure indicators
- Conducted additional planning meetings and Automated Job Hazard Analysis (AJHA) for canyon entries, focusing on improving combustible loading. Additionally, radiological characterization, engineering visual evaluation of canyon and crane will be performed in support of future Base Operations and K3 project work. Entries are planned for this summer.
- Performed annual calibration of Hot Cell Differential Pressure Indicators
- Performed annual calibration of Differential Pressure Indicator K3-DPI-1-1
- Performed the 365 day calibration of Pool Cell Ion Exchange flow valve and I/P convertors
- Performed annual calibration of Pool Cell 1 and 11 Ion Exchange flow meters
- Performed calibration of K3 Exhaust Duct Pressure Indicator/Transmitter K3-DPI-3-22 and K3-DPT-3-22
- Completed the installation of walkway on 225B roof. Engineering identified potential issues with roofing material adherence. Path forward is to be developed with engineering and roof contractor.
- Initiated the refurbishment of air compressor #1. Replaced rear oil/shaft seal and hoses, radiator mounting brackets require welding.
- Completed 40 PM work packages
- Completed monthly Technical Safety Requirement (TSR) and environmental PM and surveillance activities
- WESF Stabilization and Ventilation Project:
  - Presented environmental permitting to Senior Executive Committee (Regulators/ RL)
  - Awarded contract for preparation of Conceptual Design Report (CDR)
  - Transmitted major modification determination to RL
  - WESF closure plan transmitted to RL for review
  - Received Capital Determination from CHPRC Finance
  - Issued As Low As Reasonably Achievable (ALARA) Plan
  - Issued Preliminary Hazards Analysis
- Extended Storage Preparations:
  - Awarded contract for preparation of a Functions and Requirements Document and a Performance Specification – Kick-off meeting held on May 28, 2014
  - Received Capital Determination from CHPRC Finance

### 13.03 Canister Storage Building (CSB)

- Continued Multi-Canister Overpack (MCO) monitoring program
- Completed:
  - Six-month AH-006 and MCO Handling Machine (MHM) HF-1 High Efficiency Particulate Air (HEPA) filter test
  - Annual MCO sample hood helium pressure gauge (PI-743, PT-742) and temperature indicator (TIT-723) calibrations
  - Annual Radiation absorbed dose (RAD)-Vault and Training, Research, Isotopes, General Atomic (TRIGA) storage cask inspections (Neutron Radiography Facility TRIGA casks, DOT-6M containers and Oregon State University TRIGA overpacks)
  - Annual Industrial Organization for Standards (ISO) container/ Nuclear Assurance Corporation (NAC-1) storage cask inspections
  - Annual CSB and Fire Water Pump House fire system and alarm tests and fire alarm control panel inspections
  - Annual air compressor (CX-1A & CX-1B) maintenance
  - 30 Preventive Maintenance (PM) work packages

**13.07 Waste Receiving and Processing Facility (WRAP)**

- Performed/Completed:
  - o 2336W One year glove box Ansul Discharge Panel test and inspection
  - o Dwyer glove box Pressure Differential Indicating Switch Low (PDISL) calibrations Technical Safety Requirement (TSR)
  - o Implementation of the Master Documented Safety Analysis (MDSA) Revision 10
- Surveillances:
  - o 29 TSR surveillances
  - o 12 Preventive Maintenance (PM) packages
  - o 96 Radiological (Rad) surveillances
  - o 44 Operational surveillances

**13.08 T Plant**

- Completed:
  - o 132 fire barrier penetrations (total of 279 of 280 completed to date)
  - o ACT-1 and -2 Annual TSR aerosol testing
  - o “Fit Test” for 2706-T ACT-1 pre-filter frame prototype
  - o Lead paint abatement in 271T/Room 201 in support of Fire Barrier work
  - o Universal waste shipment PG030
  - o Fabrication of ACT-1 pre-filter spacers
  - o MDSA Rev 10 implementation
- Shipments
  - o Completed one shipment to the Centralized Consolidation/ Recycling Center (CCRC)

**13.09 Central Waste Complex (CWC) and Low Level Burial Grounds (LLBG)**

- Applied 39 new covers to waste boxes in the CWC Outside Storage Area ‘A’
- Moved one box (#0081877) from Outside Storage Area ‘A’ into Building 2403WD
- Completed MDSA Rev 10 implementation
- Prepared and loaded Fiberglass-reinforced plywood (FRP) waste box 753DMAF02.B into Super 7A trailer in Outside Storage Area ‘A’
- Surveillances:
  - o 11 TSR surveillances
  - o 34 PM packages
  - o 212 Rad surveillances
  - o 79 Operational surveillances
- Shipments:
  - o Received four shipments totaling 18 drums and four Standard Waste Box (SWB) waste packages of Transuranic Mixed Waste (TRU/M) from Plutonium Finishing Plant (PFP)
  - o Received two shipments totaling 14 drums of TRU/M waste from Pacific Northwest National Laboratory (PNNL)

**13.11 Liquid Effluent Facilities (LEF)**

- Removed contaminated and uncontaminated bird nests from the ETF Complex
- Liquid Effluent Retention Facility (LERF) Cover Deficiencies
  - o Vendor representative provided technical assistance on deficiencies previously identified on Basin 42 and 43 covers. Repair options were reviewed with representative, Operations, and Engineering. Work packages are being developed to facilitate repairs.
- Herbicide was applied to the bird ponds’ drain field South of 2025EA
- Performed full-up drill at 2025ED Load-In Facility

- Completed replacement of modem to restore data line between Disposal and 242A
- Performed dose surveys at Basin 44 corners using the crane
- Graded the road to Treated Effluent Disposal Facility (TEDF)

LERF Basin Number	Bulk Water Pumped This Month (gallons)	Bulk Water Pumped CY14 (gallons)	Slurry Pumped This Month (gallons)	Slurry Pumped CY14 (gallons)	Mud Removed This Month (pounds)	Mud Removed CY14 (pounds)	% Complete	Change
42	28,908	129,926	0	0	0	0	92%	-
43	0	0	0	0	0	0	84%	-
44	41,075	87,587	22,610	26,381	0	0	91%	-

### Environmental Restoration Disposal Facility (ERDF) Leachate to 200 West Pump and Treat Facility (200W P&T)

- Submitted Change Proposal for planning, permitting, and preliminary design of the project and for environmental permitting for Permafix Northwest (PFNW)
- Received supplemental Change Order to take project through final design
- Continued development of Functional Design Criteria for the ERDF leachate to 200W Pump & Treat project
- Initiated process for cultural and ecological reviews and excavation permit
- Received proposal from PFWN for environmental permitting to support evaporator installation
- Received 7 tankers:
  - o 26.0K gallons (187K fiscal year [FY])
- Received 24 drums from Waste Sampling and Characterization Facility (WSCF)
- Treated effluent to State-Approved Land Disposal Site:
  - o 0.0M gallons (1.9M FY)
- Discharged to 200A TEDF:
  - o 2.49M gallons (111M FY)
- Received ERDF Leachate
  - o 284K gallons (1.35M FY)

### 13.12 Integrated Disposal Facility

- Completed monthly inspections

### 13.16 Off Site Spent Nuclear Fuel Disposition

- Maintained coordination for offsite Spent Nuclear Fuel Disposition

### 13.21 Mixed Waste Disposal Trenches

- Completed:
  - o One TSR surveillance
  - o 20 Rad surveillances
  - o Five Operational surveillances
- Shipments:
  - o Received three shipments totaling seven boxes and three drums of Mixed Low-Level Waste (M/LLW) from Perma-Fix Northwest (PFNW) and disposed the waste in to Trench 31
  - o Shipped two tankers of MWT leachate to Liquid Effluent Retention Facility/ Effluent Treatment Facility (LERF/ETF) (one from T31 and one from T34)

## MAJOR ISSUES

**Issue:** A recently received shipping exemption allowing road closures to an offsite repackaging contractor does not allow the return of waste following repackaging and impacts overall abilities for continued waste shipping.

**Corrective Action:** RL to obtain approval on exceptions to DOE Order 460.1. Obtain drivers from Federal agency (Bonneville Power Administration). BPA support expected to end in June 2014.

**Status:** TRU shipments delayed. Initial exemptions have been received, but not all planned shipments are currently authorized. Continuing to work with RL to resolve.

**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. This configuration would also mitigate/eliminate the risk and cost for long-term management of these containers.

**Status:** Using 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 overpacking drums). Provided letter to RL identifying risk and requesting path forward. Awaiting RL response.

**Issue:** Emergency lighting in the Central Waste Complex (CWC) and Waste Receiving and Packaging (WRAP) facilities is failing at an increasing rate. The current version of fluorescent lighting for the 2403 series buildings is no longer available.

**Corrective Action:** Procure and install new lighting that is readily available and can be maintained in inventory system.

**Status:** Facilities are currently executing compensatory measures for worker safety.

## RISK MANAGEMENT STATUS

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

 Working - No Concerns  
 Working - Concern  
 Working - Critical

 Increased Confidence  
 No Change  
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-0013</b>				
<b>PRC-010: Requirements Change</b>	Changes to DOE Orders, Federal, or State Regulations could impact the baseline scope, schedule and/or cost. There is a risk that state directed changes could impact the ability to perform work in the planned manner.			Continued discussions with Regulators indicate potential for additional changes.
WSD-019: Commercial Capability	MLLW treatment capacity/capability does not meet Hanford needs or treatment does not occur as scheduled. W&F manages contract for CHPRC waste treatment. Work scope within PBS RL-0013 is not impacted. Mixed Waste may require temporary storage within CWC until sufficient volume is generated for efficient processing. Evaluate additional waste volumes of TRU waste being sent to treatment contractors to maintain contract viability.			Forecasted volumes from CHPRC Projects may not allow commercial capability to remain viable. Shipments impacted due to equipment issues and improvements to road closure process.  Additional shipments are included in "Buy Back" list which is pending RL approval.
WSD-086: W&FM Industrial Accident or Contamination	Workers are trained in equipment operation, radiological control procedures (ALARA), and response to events. Processes and procedures identify safe equipment operation, control of radiological/hazardous materials.			LERF cover cleaning and Trench 94 biological contamination cleanup progressing. Recovery schedule developed to address weather and resource delays.
WSD-125: Three-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues	Perform routine surveillances (daily/weekly) of containers within the SWOC storage areas and identify abnormalities. Develop a "watch-list" for containers that have existing corrosion to monitor for signs of accelerated corrosion. Develop plans for dealing with degraded/abnormal containers. Discrepant containers may require additional monitoring, patching, covering or overpack as required. If a breach is identified, implement response procedures and perform response actions as appropriate.			Continue to perform covering and overpacking of containers in CWC.
WSD-079 (WRAP) WSD-097 (T-Plant) WSD-120 (WESF) WSD-121 (LERF) WSD-122 (CSB) WSD-135: (ETF) WSD-136: (CWC) Equipment Failure at W&F Facility	Continue with the current maintenance program and aggressive PM and CM program. Maintain spare parts inventory, perform Preventative Maintenance as scheduled, and remove unused equipment from service.			<ul style="list-style-type: none"> <li>• Received correspondence from RL on direction to commence fabrication of ETF heat exchanger. LERF Cover anomalies are being evaluated – Vendor to evaluate.</li> <li>• WESF roof Contractor performing warranty work in June.</li> <li>• Schedule developed to address CWC repair items- requires DOE authorization to proceed.</li> <li>• Emergency Lighting in CWC is failing at an increased rate. Project is executing compensatory measures.</li> <li>• T-Plant fire barrier repair work scope is progressing as scheduled.</li> </ul>
WSD-133: Results of External Audits/Assessments Impact Operations	Conduct operations in accordance with current approved procedures and processes. CHPRC and RL conduct routine assessments to assess conduct of operations and maintenance activities. Work with oversight groups to understand regulatory basis for interpretations.			Working compliance matrix and implementing actions/documents for the Ecology Agreed Order. Requirements may exceed planned work scope in relation to box 231-ZDR-11.

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	9.0	9.7	7.8	0.7	7.6%	1.9	19.7%

Numbers are rounded to the nearest \$0.1M

#### CM Schedule Performance (\$0.7M/+7.6%)

The current period favorable schedule variance is within reporting threshold.

#### CM Cost Performance (+\$1.9M/+19.7%)

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

## 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	847.4	848.0	818.4	0.6	0.1%	29.7	3.5%	1,342.7	1,267.0	75.7

Numbers are rounded to the nearest \$0.1M

#### CTD Schedule Performance (+\$0.6M/+0.1%)

The schedule variance is within threshold.

#### CTD Cost Performance (+\$29.7M/+3.5%)

The favorable cost variance is within threshold.

#### Variance at Completion (+\$75.7M/-5.6%)

The Variance at Completion is due to 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	FY2014		
	Projected Funding	Spending Forecast	Spend Variance
RL-0013	83.8	83.4	0.4

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis

Projected Funding is unchanged from the prior month. The change in FY2014 Spending Forecast from \$82.8M to \$83.4M is primarily the result of material and resource adjustments.

### Critical Path Schedule

Critical path analysis can be provided upon request.

### Baseline Change Requests

BCR-013-14-012R0 – *BCWS Change for 310 Retention/Transfer System FY2014 LOE Activities*

BCR-PRC-14-010R0 – *CO #248 NTE, Implement DOE-0342, Rev 2A, Hanford Site CBDPP*

BCR-PRC-14-014R0 – *Incorporate Draft Revised Option Period Performance Measures*

## 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. Tri-Party Agreement Milestones are currently being renegotiated between the Parties to align milestone work scope with anticipated FY2014 funding scenarios and Hanford site priorities.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-091-03H	Submit Revision of TRUM Waste and MLLW PMP to Ecology	6/30/14		6/30/14	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
<b>CONTRACT</b>			
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)



**CH2MHILL**  
Plateau Remediation Company



**M. J. Cherry**  
Acting Vice President and  
Project Manager for  
Soil and Groundwater  
Remediation Project

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

May 2014  
CHPRC-2014-05, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

Pump-and-Treat (P&T) Operations continued progress on the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)* remedial process documentation for the River Corridor and Central Plateau. Sampling and groundwater treatment completed in May includes the following:

Treatment Facility	Million Gallons Treated		Chrome (kg)		Carbon Tet (kg)		Nitrate as N (kg)		Tech-99 (pCi)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX P&T	27.2	195.4	15.0	161.3	-	-	-	-	-	-
HX P&T	30.0	197.9	1.9	17.3	-	-	-	-	-	-
KR-4 P&T	13.5	94.3	0.5	3.7	-	-	-	-	-	-
KW P&T	13.4	102.6	0.9	10.2	-	-	-	-	-	-
KX P&T	27.1	185.5	2.2	16.5	-	-	-	-	-	-
200 West P&T	66.6	496.0	6.6	48.3	265	1,856	4,752	34,972	.095x10 <sup>12</sup>	.712x10 <sup>12</sup>
<b>Combined</b>	<b>177.7</b>	<b>1,271.7</b>	<b>27.0</b>	<b>257.3</b>	<b>264</b>	<b>1,856</b>	<b>4,752</b>	<b>34,972</b>	<b>.095x10<sup>12</sup></b>	<b>.712x10<sup>12</sup></b>

Sampling	May	FY2014 Cumulative
Well Sampling Events	145	1,483
Aquifer Tube Sampling Events	38	404
Total Number of Sampling Events	183	1,887
Samples Collected	856	9,114
Analyses Performed	1,724	14,694

## EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
14-EMS-SGWR-OB1-T1	Reduce air emissions at the 200 West P&T Facility	Update air emissions baseline for 200 West P&T Facility and evaluate data to identify if additional air modeling is warranted and whether opportunities exist to reduce air-toxic emissions.	9/30/14	On schedule
		A tabulation of emissions, in mass per year, for constituents of concern (i.e., all constituents analyzed for during sampling events). Evaluation results will be documented as a Worksite Assessment(s).	Quarterly	80% complete
14-SGWR-EMS-OB2-T1	Reduce the amount of toxic and/or hazardous materials in the environment	P&T 1.8 billion gallons of contaminated groundwater from all P&T facilities during FY2014.	9/30/14	On schedule

Objective #	Objective	Target	Due Date	Status
		The volume of contaminated groundwater that is treated as measured in gallons.	Monthly	1,272M gallons treated through 5/31/14
14-SGWR-EMS-OB3-T1	Reduced resources use (fuel use)	Evaluate opportunities to discharge purgewater to ground from newly drilled wells.	9/30/14	Complete
		Report results of evaluation by Well ID/Well Name.	Monthly	100% complete
14-SGWR-EMS-OB4-T1	Reduce fuel consumption/greenhouse gas emissions and increase resource utilization (sampling, well maintenance, and waste management personnel)	Seek EPA and Ecology approval to manage miscellaneous solid waste (MSW) from well sampling and maintenance activities in one centralized area.	3/30/14	Under revision
		This target will be met upon submittal of TPA Change Notice to RL, EPA, and Ecology.	Status at completion	Under revision

## 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	2	28	<p><b>5/8/2014</b> – Employee experienced neck pain while operating machinery and was taken to HPMC for evaluation. Employee was released to work without restriction. (23387) S&amp;GRP</p> <p><b>5/21/2014</b> – Employee received numerous slivers in hand and was taken to HPMC for medical evaluation and treatment. The employee was treated (wound/skin care) and released to work with temporary restriction. (23395) S&amp;GRP</p>
Near-Misses	0	2	N/A

## KEY ACCOMPLISHMENTS

### RL-0030.O1 RL 30 Operations

#### RL 30 Integration & Assessments

##### Strategic Planning

- Developed a summary for RL to identify where resolution of the individual issues under the RCRA/CERCLA integration umbrella will be documented. Working with RL to determine the extent of information that will be included in the Principles and Parameters document.
- Initiated planning for development of a 3D model that will depict Central Plateau WIDS waste sites and major structures on the surface and subsurface. The model will be constructed in phases to include the highest priority sites first.

##### Risk & Modeling Integration

- CHPRC is drafting a Memorandum of Agreement (MOA) to define roles, responsibilities, and interfaces between RL and ORP regarding development of the IDF PA and the Waste Incidental to Reprocessing (WIR) determination. The MOA received extensive comments from ORP and the Tank Operations Contractor. Several key points must be resolved before the MOA can be accepted, including incorporation of the transfer of responsibility for management of the IDF PA from RL to ORP.

##### Operations Assurance

- An independent corporate assessment team from CH2M HILL conducted an interim Conduct of Operations (Con Ops) performance review of S&GRP field operations. The review scope included P&T operations, sampling, and well maintenance. The interim independent review was one of the actions developed in response to DOE EM-42 assessment. The results of the review indicate that S&GRP has made significant improvement of Con Ops performance over the past year. The assessment report also provided the project with several opportunities for improvement.

##### WSCF Closure

- Due to WSCF closure, S&GRP is shipping all of the environmental and IH samples to offsite laboratories for analysis.
- The Joint Contractor Space Utilization Committee met the week of May 12, 2014, to consider S&GRP's request for additional buildings. The committee supported the request and has recommended the facilities be re-purposed for sample packaging and shipping operations.
- Key dates include:
  - o June 1, 2014 - WSCF will no longer support offsite shipments.
  - o June 30, 2014 - All analyses and reports will be finalized by this date.
  - o September 30, 2014 - site wide contracts for environmental analytical services and industrial hygiene analytical services will expire; CHPRC will need contracts in place with offsite labs for these services.

##### River Corridor

###### 100-BC-5 Operable Unit

- Groundwater and aquifer tube monitoring continued to support the evaluation of natural attenuation mechanisms and the groundwater to surface water interaction.

###### 100-KR-4 Operable Unit

- Well construction was completed for two of the three extraction wells planned for the KX P&T.
- Construction began on connection of an additional extraction and injection well to the KW P&T.

###### 100-HR-3 Operable Unit

- Drilling and temporary well construction was completed on the four wells within the 100-D-100 excavation. Collection of soil samples during drilling and the first round of depth discrete water sampling was also completed.
- The 100-HR-3 OU PP, working draft Rev 0, was provided to the Ecology for review.
- The 100-D/H Monitoring Plan was reviewed by RL's SAP Review Panel on May 13, 2014. Comment incorporation is underway.

#### **100-FR-3 Operable Unit**

- EPA's comments on the 100-FR-3 OU Rev 0 RI/FS and PP, draft Rev 0, have been incorporated and these documents are on schedule to be completed by June 5, 2014. The public review period is scheduled to begin June 9, 2014, which includes a public meeting in Hood River, Oregon.

#### **300-AF-5 Operable Unit**

- The 300 Area Integrated Remedial Design Report/Remedial Action Work Plan, Draft A, was transmitted to RL (CHPRC-1401622, dated May 21, 2014) for their subsequent transmittal to EPA (14-AMRP-0194, dated May 22, 2014).

### **Central Plateau**

#### **200-IS-1, 200-SW-2 & 200-WA-1 RI/FS Work Plans**

- Preparation of the 200-IS-1, 200-WA-1 and 200-SW-2 RI/FS work plans continue with the regulatory agencies through a series of meetings and workshops to resolve key issues, determine an appropriate schedule to resolve comments on the Draft A work plans, discuss outstanding data needs, and incorporate the Central Plateau Principles.

#### **200-East Closure Plans**

- Final versions of the five closures plans were submitted to RL on May 27, 2014. These closure plans will then be submitted by RL to Ecology by June 30, 2014 in accordance with TPA milestone M-037-02.

#### **200-UP-1 Operable Unit**

- The draft 30% design package for the U Plant area uranium extraction and treatment train was completed for concurrent CHPRC and RL review.
- A limited notice to proceed for fabrication of the ion exchange train was issued to AVANTech on May 29, 2014. Procurement of well drilling services for the extraction wells continues.
- The Sampling and Analysis Plan for Remediation Wells in the 200-UP-1 Operable Unit, Draft A, DOE/RL-2014-27, was submitted to RL for EPA's review.

#### **200-BP-5 Operable Unit**

- Baseline water level measurements were initiated to support the first phase of the treatability test (step-drawdown test) scheduled for late June.
- The first well of four possible wells around the Modular Storage Units is undergoing water level monitoring, including the evaluation of barometric response. Recommendations will then be made for installing the remaining three wells.

#### **200-PO-1 Operable Unit**

- The Groundwater Sampling and Analysis Plan for the 200-PO-1 Groundwater Operable Unit, Decisional Draft, were reviewed by RL's SAP Review Panel on May 29, 2014. Comment incorporation is underway.

#### **200 West P&T**

- Average pumping rate for May was 1,606 gpm.
- Effluent concentrations remain below cleanup levels specified in Record of Decision.
- Two unplanned shutdowns occurred in May. The first, on May 5, 2014, lasted approximately 2.5 hours and was caused by the failure of a data switch. The second was caused by a break in a main header in ITB-2 just after midnight on May 20, 2014. The plant was re-started at approximately 5:30

pm that same day.

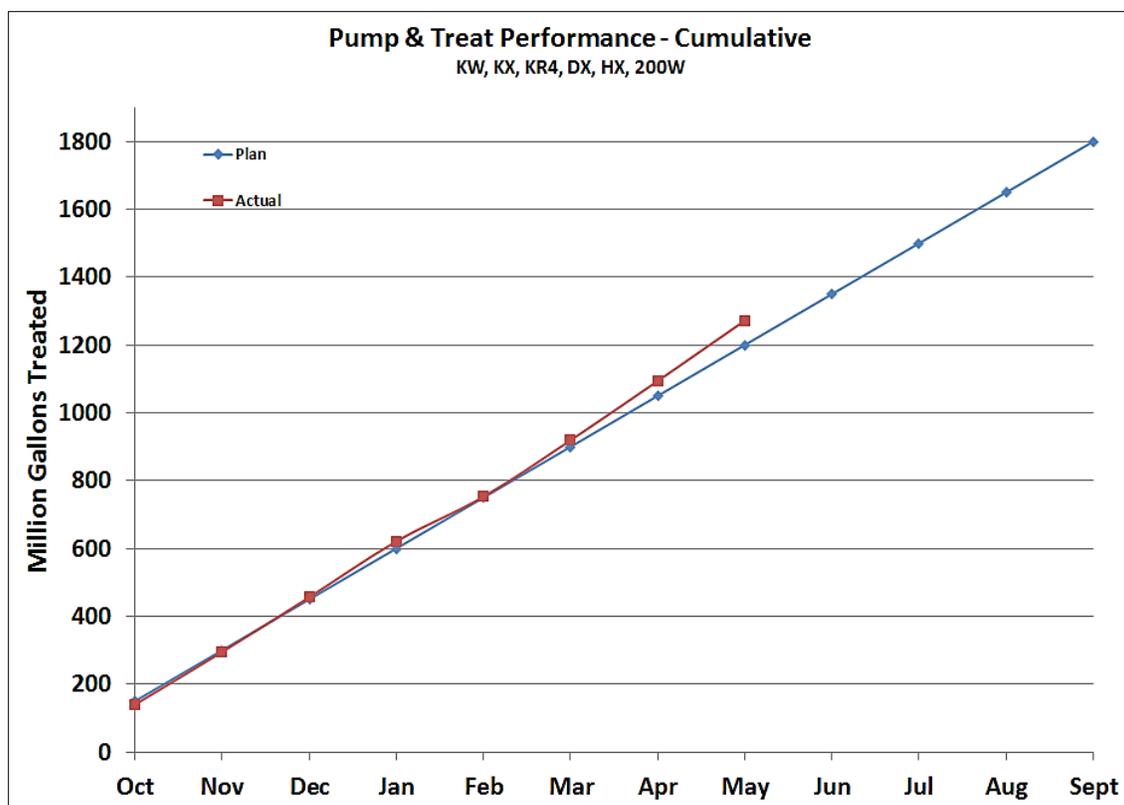
- One of four planned injection wells is complete. The other three are currently being drilled and constructed.

**200-DV-1 Operable Unit**

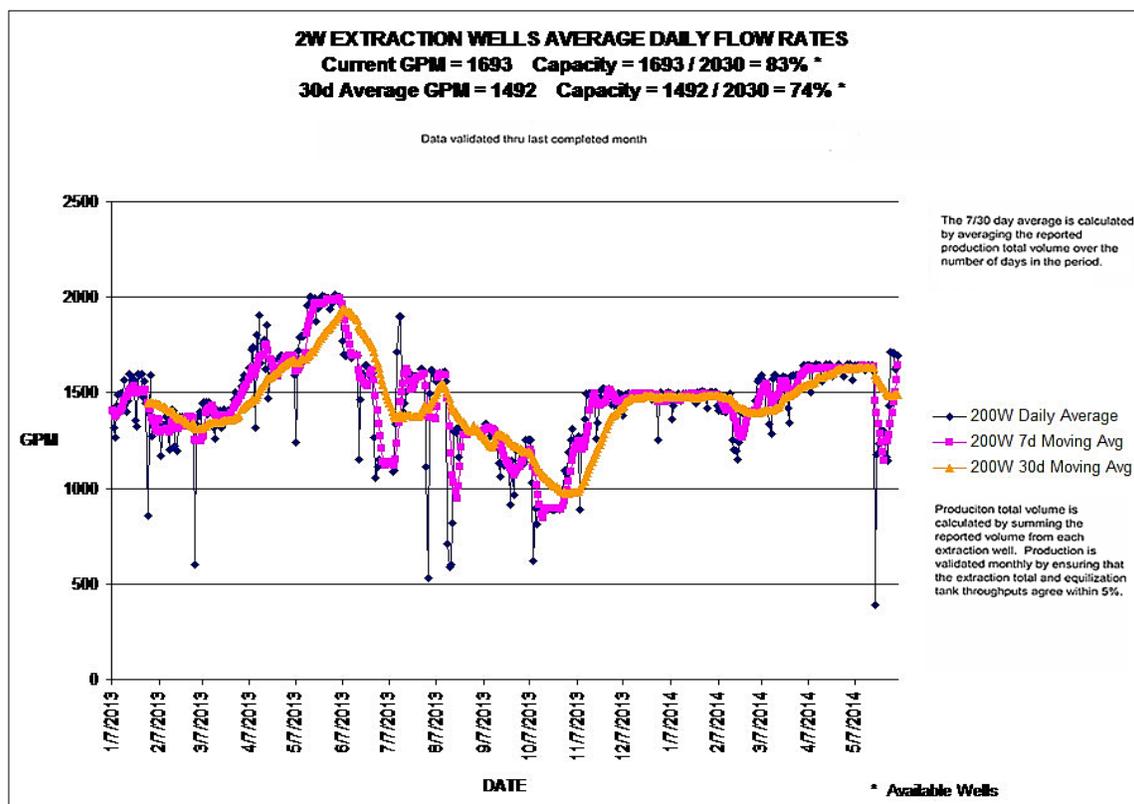
- New extraction wells 299-E33-351 and 299-E33-350 have been installed and are in the process of being hooked up to the extraction system. Work on the construction of the electrical racks for each of these stations continues.
- The B Area perched water extraction system removed 6,330 gallons in May, bringing the total volume of perched water removed to 206,057 gallons since initiating operations on August 30, 2011. The following quantities of contaminants were removed for the month of May:

Contaminant	May	Cumulative (since startup)
Tc-99	7.9E-04 Ci	24.9E-03 Ci
Uranium	2.5 kg	44.5 kg
Nitrates	11.4 kg	417 kg

**FY2014 P&T Operations**



## 200 West P&amp;T Operations



## MAJOR ISSUES

**Issue** – Tribal approval of the Section 106 Cultural Review Document that will allow injection of apatite in the 100-NR-2 barrier wells has been delayed. Approval of this document is required before construction of the 100-NR-2 apatite barrier can begin. This delay has impacted our ability to complete the installation of an additional 1,000-ft. of the barrier this fiscal year during high water.

**Corrective Action** – Three field tours of the 100-NR-2 apatite barrier have been provided to the Nez Perce, Umatilla, and Yakama. The Section 106 Cultural Review Document was revised to include only the scope associated with apatite aquifer injection and resubmitted in April for Tribal approval. The 30-day review period on the resubmitted document ended on May 26, 2014 without approval.

**Status** – Follow-up meetings between RL and the Tribes have not been successful in obtaining their approval of the cultural review. The Section 106 Cultural Review Document is now planned to be revised to include both the apatite barrier and vadose zone jet injection scope, which may result in an August approval. A Memorandum of Agreement is being prepared to address mitigation of past damages. Due to the delay, the project is evaluating options for apatite injection during lower water periods.

### RISK MANAGEMENT STATUS

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

 Working - No Concerns  
 Working - Concern  
 Working - Critical

 Increased Confidence  
 No Change  
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-030/WBS 030</b>				
<p><b>SGW-045: Regulator Comments Change Requirements</b></p> <p><b>SGW-008: Regulatory Documents Result in Significant Comments from Regulators</b></p>	<p>A standardized approach has been developed to quickly evaluate and categorize comments for resolution. This process also identifies comments that will require management attention in order to achieve resolution. For significant comments, white papers are prepared for RL management concurrence. These white papers then form the basis to help resolve significant comments with the agencies. In addition, routine meetings are conducted to address agency comments and to remain current on the influences from agencies.</p>			<p>Continue to work open issues with RL and Ecology. Significant progress has been achieved over the past several months to resolve Ecology's comments on the 100-D/H RI/FS through the preparation of white papers.</p> <p>Four technical position papers have also been submitted to Ecology to resolve significant comments on the 100-N RI/FS. Of the four technical position papers, it appears that additional evaluation will be required to resolve the path forward for phyto-remediation in the 100-N RI/FS.</p>
<p><b>SGW-004: Cultural Resource Reviews</b></p>	<p>Obtain cultural/ecological reviews before design progresses. Walk downs with cultural resource review teams (tribal, DOE, Engineering, etc.) to start early and be performed periodically throughout the process. Assign contractors to other activities while awaiting results. Work with the State Archeological and Historical Preservation office.</p>			<p>CHPRC continues to work with MSA to accelerate cultural reviews for existing work and is developing a strategy for conducting areal reviews to eliminate the need for project by project reviews in the same areas.</p> <p>Several meetings have been held with the Tribes to help resolve their specific concerns regarding 100-N Area. To date, these meetings have not been successful and as a result, installation of the 100-N apatite barrier has been delayed.</p>
<p><b>OPPORTUNITY: SGW-007A: Sampling Requirement Reduction SGW-007B: Analytical Reduction</b></p>	<p>Sampling reduction can be achieved by combining sample sites, promptly removing sample sites from the list once characterization is established to support regulatory down-posting, work with regulatory agencies to minimize sample sites and sampling frequencies (i.e. quarterly to yearly). Analytical and laboratory characterization can be achieved by working with regulatory agencies to minimize the analysis required, determining a standardized analyses runs, and working with the laboratories to streamline data validation processes.</p>			<p>Several actions are underway to implement this opportunity. First, a plan to reduce the number of overall SAPs and associated sampling over the next three years was provided to RL on March 30, 2014. RL's comments have been incorporated and the revised plan was provided to RL on April 29, 2014. In accordance with this plan, three revised monitoring plans (100-K, 100-D/H, and 200-PO-1) have been provided to RL for review. Two of the three monitoring plans have been reviewed RL's SAP Review Panel and comments are being incorporated.</p>
<p><b>SGW-160: Failed Well Trips</b></p>	<p>Develop pre-sample inspection and performance plans for each well or well network. Perform pre-inspection trips to ensure the well can be accessed and include IH monitoring during the pre-inspection trip. Combine multiple well trips into one sampling event based on results of pre-sample inspection results. Utilize established procedures to respond to failed motors/equipment, high IH readings, and when to identify stop-work when conditions are outside established protocols. Reassign sampling crews to other wells if alternate work is available.</p>			<p>Pre-inspections continue to avoid failed trips.</p>

<p>SGW-159: Ability to Maintain Flow Rates through Pump and Treat Units</p>	<p>Acquire technical specialist in bio-reactor operation at 200 West P&amp;T to oversee the complexity associated with the water volume/flow and evaluate optimization and nutrient additions to the bed reactor. Installation of additional extraction or injection wells is required to boost pumping rates to 2,000 gpm. Routine well maintenance/equipment maintenance program is essential to maximize operational efficiency and minimize down-time.</p>			<p>A full time bio-reactor specialist is now working at 200 West P&amp;T. The specialist is working on optimizing volume of feed material (carbon substrate) and vitamins to the fluidized bed reactor. Four additional injection wells are scheduled to be installed in FY2014 to ensure there is adequate capacity to allow several injection wells to be offline for cleaning while still maintaining 2,000 gpm pumping rates.</p>
<p>SGW-092: 200 West P&amp;T Operating Requirements</p>	<p>Overtime is utilized to perform critical corrective and preventative maintenance. As operations and maintenance knowledge is learned, staffing levels may be adjusted to achieve optimum P&amp;T operation.</p>			<p>As preventative maintenance packages proceed through the development process, staffing levels will be evaluated to ensure the P&amp;T facility achieves continuous operation.</p>
<p>SGW-135: Major Equipment Failure at a Pump &amp; Treat</p>	<p>For the P&amp;T facilities, maintenance will continue with the established Preventative Maintenance and Corrective Maintenance program. Utilize trending to monitor precipitate and bio-fouling of injection wells. Utilize trends to optimize well cleaning frequency to keep injection wells clear of precipitate and bio-fouling. Install additional injection wells to increase injection capacity and plan down-time for injection well cleaning cycles. Continue staff training on equipment and processes. Maintain spare-parts inventory.</p>			<p>Pump and treat plants operating as designed. 200-West P&amp;T continuing to experience higher than planned maintenance due to injection well bio-fouling and instrumentation issues.</p>

### 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	10.9	10.6	10.3	(0.3)	-2.5	0.3	2.6

Numbers are rounded to the nearest \$0.1M.

**CM Schedule Performance (-\$0.3M/-2.5%)** Variance is within reporting thresholds.

**CM Cost Performance (+\$0.3M/+2.6%)** Variance is within reporting thresholds.

## Contract-to-Date (\$M)

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	970.3	972.2	960.1	1.9	0.2	12.1	1.2	1,514.1	1,497.0	17.1

Numbers are rounded to the nearest \$0.1M.

### CTD Schedule Performance (+\$1.9M/+0.2%)

Variance is within reporting thresholds.

### CTD Cost Performance (+\$12.1M/+1.2%)

Variance is within reporting thresholds.

### Variance at Completion (+\$17.1M/+1.1%)

The Variance at Completion is within reporting thresholds.

**Contract Performance Report Formats are provided in Appendix A.**

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

RL-0030 Soil and Groundwater Remediation	FY2014		
	Projected Funding	Spending Forecast	Spend Variance
RL-0030	121.5	115.9	5.5

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis

Projected Funding remained unchanged at \$121.5M. Spending forecast has been reduced to reflect impacts of the delay with the cultural and ecological review on the apatite injections.

### Critical Path Schedule

Critical path analysis can be provided upon request.

### Baseline Change Requests

BCR-030-14-008R0 - *Incorporate Definitization of CO #237, 200-DV-1 Transient Perched Water*

BCR-030-14-011R0 - *200-BP-5 Treatability Test Revision*

BCR-030-14-012R0 - *Definitization of CO #238, 100-NR-2 Aquifer Barrier Expansion*

BCR-030-14-013R0 - *High Risk/Value Materials & Subcontracts Planning*

BCR-030-14-014R0 - *Incorporate NTE for CO #254, CP Inner Area Cleanup Principles/Risk Assessment and Modeling Parameters Document*

**FY2014 Management Reserve (Funded): \$0.75M**

No FY2014 management reserve was used during May.

**MILESTONE STATUS**

Tri-Party Agreement (TPA) milestones represent significant achievements in project execution. Enforceable TPA 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 TPA milestones. The following table is a one year look ahead of TPA enforceable milestones, non-enforceable target due dates and commitments.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comment
M-015-112	Submit Draft B, 200-IS-1 Operable Unit Pipeline System Waste Sites RFI/CMS/RI/FS Work Plan to Ecology	TPA	2/28/14			Resolution dispute was extended on March 12, 2014, via TPA change notice to June 30, 2014. Negotiations are underway to revise the milestone due date.
M-015-113	Submit Draft B, 200-SW-2 Radioactive Landfills Group RFI/CMS/RI/FS Work Plan to Ecology	TPA	2/28/14			Resolution dispute was extended on March 12, 2014 via TPA change notice to June 30, 2014. Negotiations are underway to revise the milestone due date.
M-024-58G	Initiate Discussions of Well Commitments	TPA	6/1/14		6/2/14	On schedule
M-091-40L-042	PMM Submittal Jan-Mar 2nd Qtr. FY2014 Burial Ground Sample Results	TPA	6/15/14		6/15/14	On schedule
M-037-02	Submit Revised Closure Plans for Five Specified TSD Units	TPA	6/30/14			On schedule
M-024-65-T01	Conclude Discussions of Well Commitments	TPA	8/1/14		8/1/14	On schedule
M-091-40L-043	PMM Submittal Apr-Jun 3rd Qtr. FY2014 Burial Ground Sample Results	TPA	9/15/14		9/15/14	On schedule
M-015-38B	Submit Revised FS & PP for 200-CW-1, 200-CW-3, & 200-OA-1 Operable Units	TPA	10/30/14			Milestone is not funded in FY2014 and will be replanned as part of upcoming agency discussions.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comment
M-91-40L-044	PMM Submittal Jul-Sep 4th Qtr. FY2014 Burial Ground Sample Results	TPA	12/15/14		12/15/14	On schedule
M-024-65	RL Shall Complete Construction of all Wells Listed	TPA	12/31/14		12/31/14	On schedule
M-091-40L-045	PMM submittal Oct-Dec 1st Qtr. FY2015 Burial Ground Sample Results	TPA	3/15/15		3/15/15	On schedule
M-015-110A	Submit RFI/CMS & RI/FS Work Plan for 200-DV-1 OU to Ecology	TPA	3/31/15		9/30/14	On schedule
M-024-58H	Initiate Discussions of Well Commitments	TPA	6/1/15		6/1/15	On schedule
M-091-40L-046	PMM submittal Jan-Mar 2nd Qtr. FY2015 Burial Ground Sample Results	TPA	6/15/15		6/15/15	On schedule
M-015-21A	Submit 200-BP-5 & 200-PO-1 OU FS Report and PP(s) to Ecology	TPA	6/30/15		6/30/15	On schedule
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	TPA	6/30/15		6/30/15	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)

None currently identified.

# Section E

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



**L. T. Blackford**  
Vice President and  
Project Manager for  
Decommissioning, Waste,  
Fuels, and Remediation  
Services (DWF&RS)

**May 2014**  
CHPRC-2014-05, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

The inactive Central Plateau facilities and Radiation Areas Remedial Action (RARA) sites continue to be compliantly maintained in a low-cost surveillance and maintenance condition. The project performed Waste Information Data System (WIDS) waste site housekeeping (tumbleweed removal, correcting posting issues), conducted 72 radiological facility surveillances, and completed 32 preventive maintenance (PM) activities. The project also continued working PUREX Tank 11 asbestos abatement.

### EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
14-EMS-DWF&RS-OB1-T1	Conserve resources and reduce the generation and/or toxicity of waste at the source.	Continue inspection and management review of material and equipment storage areas at frequencies determined necessary by line management to assure continued protection of property from loss, deterioration, or damage.	09/30/14	On Schedule

### 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	2	N/A
Near-Misses	0	0	N/A

### KEY ACCOMPLISHMENTS

- Performed Waste Information Data System (WIDS) waste site housekeeping (tumbleweed removal, corrected posting issues)
- Completed:
  - o 72 radiological facility surveillances
  - o 32 preventive maintenance (PM) activities
  - o Miscellaneous facilities surveillances
- Plutonium Uranium Extraction Plant (PUREX) Tank 11 asbestos abatement
  - o Completed scaffolding installation
  - o Completed tank enclosure
- Continued planning/preparing work packages for buy back work (steamline removal and construction)

- yard demolition)
- Initiated Construction Yard demolition preparations

## MAJOR ISSUES

**Issue** – Herbicide application suspended three times in two weeks due to other Hanford (OHC) workforce odor concerns

**Corrective Action** – Work with OHC Industrial Hygienist (IH)/Industrial Safety (IS) to resolve

**Status** – Working with MSA on weekly herbicide spraying and pest control schedule. Although the window for herbicide effectiveness is narrow and conducive weather conditions are difficult to predict, this process has improved ability to conduct work without herbicide application interference.

## RISK MANAGEMENT STATUS

Unassigned Risk  
Risk Passed  
New Risk  
Change

 Working - No Concerns  
 Working - Concern  
 Working - Critical  
 Increased Confidence  
 No Change  
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-0040</b>				
D4-043: Unforeseen Facility Event Impacts Safety or Environment	Unexpected event, including contamination or chemical spread, fire, industrial accident, structural degradation, etc., requires immediate D&D of a small to medium sized facility or requires unplanned facility repairs. Current management of the shutdown facilities includes corrective maintenance based upon historic experience.			Continuing corrective maintenance activities. No unplanned events encountered.
WSR-047: Unforeseen Waste Site Event	Unforeseen waste site event, including contamination or chemical spread, fire, industrial accident, structural degradation, etc. requires immediate disposition or modification to a waste site. Routine surveillance and maintenance of the waste sites, including herbicide applications, is designed to protect workers and the environment.			Continuing waste site inspections & surveillances. No unplanned events encountered.
D4-062: Unexpected Industrial Contamination	D-4 activities are conducted in accordance with CHPRC IH and Rad protection programs to minimize contamination spread. Prior to D&D activities, the existing and historical records are reviewed to identify areas of likely industrial contamination.			PUREX Tank 11 asbestos abatement is behind schedule but is expected to complete this summer.
D4-064: Aging Building Systems/Components	The facilities have been placed in Surveillance and Maintenance mode. Perform as-scheduled maintenance activities. Perform appropriate regulatory agency and DOE notifications for system failures or prolonged outage. Continually evaluate system maintenance frequencies.			No issues for the current month.
D4-067: Increased Asbestos Abatement	Minimal pre-mitigation is possible. Conduct asbestos abatement to maintain a safe and complaint work site.			Developing prioritization of abandoned steam line removal sections with additional funding. Received authorization to repair/abate ~1,100 linear feet of steam line.

## 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	1.1	1.4	1.2	0.3	28.0%	0.2	14.1%

Numbers are rounded to the nearest \$0.1M

**CM Schedule Performance: (+\$0.3M/+28.0%)**

Variance is within threshold.

**CM Cost Performance: (+\$0.2M/+14.1%)**

Variance is within threshold.

### 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	384.3	383.6	353.5	(0.7)	-0.2%	30.1	7.8%	491.9	460.1	31.8

Numbers are rounded to the nearest \$0.1M

**CTD Schedule Performance: (-\$0.7M/-0.2%)**

Variance is within threshold.

**CTD Cost Performance: (+\$30.1M/+7.8%)**

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 (\$2.6M), Cold and Dark and Characterization/Waste Identification Form teams (\$4.0M), lower than planned capital equipment costs (\$3.0M) and efficiencies with Arid Lands Ecology (ALE) (\$3.7M), North Slope Facilities (\$1.2M), disposition of railcars D&D (\$2.1M), and Industrial 7 Project (\$3.6M); this is offset by increased material and equipment costs, unexpected asbestos levels, and schedule delays in other ARRA D4 Projects (-\$15.3M). Efficiencies in Outer Area Waste Sites (\$6.7M) are primarily due to Remove, Treat, and Dispose (RTD) O-Zone Waste Sites, ERDF passback which includes the operational efficiencies associated with use of the super dump truck. In addition, under runs in overhead allocation and Usage Based Services (\$7.3M) 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 (\$1.4M), S&M costs less than expected (\$4.1M), U Plant completion of the sampling of Cell 30 with less resources than planned (\$1.1M), Program Management utilizing less resources (\$3.0M) and under run in overhead allocations (\$1.6M).

**Variance at Completion (+\$31.8M/+6.5%)**

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	FY2014		
	Projected Funding	Spending Forecast	Spend Variance
RL-0040	13.2	12.8	0.4

Numbers are rounded to the nearest \$0.1M.

**Funds/Variance Analysis**

Projected Funding remained the same at \$13.2M. Change in spend forecast from \$12.7 to \$12.8 is a result adjustment to PUREX Tank 11 project to reflect longer duration to complete and a previously forecasted labor rate reduction that was determined to be unnecessary.

**Critical Path Schedule**

Critical path analysis can be provided upon request.

**Baseline Change Requests**

- BCR-PRC-14-010R0 – *CO #248 NTE, Implement DOE-0342, Rev 2A, Hanford Site CBDPP*
- BCR-PRC-14-014R0 – *Incorporate Draft Revised Option Period Performance Measures*

**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 F

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



**L. T. Blackford**  
Vice President and  
Project Manager for  
Decommissioning, Waste,  
Fuels, and Remediation  
Services (DWF&RS)

May 2014  
CHPRC-2014-05, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

Completed Hazard Review Board (HRB) for 105KE Roof work package and installation of net material and corrugated panels to cover opening on 105KE Roof. Initiated work planning for 100K Characterization Wells high risk drilling. Completed routine surveillances. Continued work package preparation for utility isolation at MO-293 and MO-442 in support of planned demolition.

## EMS OBJECTIVES AND TARGET STATUS

Objective #	Objective	Target	Due Date	Status
14-EMS-DWF&RS-OB1-T1	Conserve resources and reduce the generation and/or toxicity of waste at the source.	Continue inspection and management review of material and equipment storage areas at frequencies determined necessary by line management to assure continued protection of property from loss, deterioration, or damage.	09/30/14	On Schedule

## 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

- 105KE Roof Repair:
  - o Subcontractor Completed Hazard Review Board (HRB) on Work Package
  - o Issued work package document for the repair and foaming of the roof
  - o Completed installing net material and corrugated panels to cover opening
- 100K Characterization Wells:
  - o Issued change proposal in response to Change Order 253
  - o Initiated work planning for high risk drilling
  - o Initiated revision of the sampling instruction document
- Continued work package preparation for utility isolation at Head House area facility demolitions. Service requests have been submitted to MSA for their support in Mechanical (water) and Electrical isolations

- Completed Surveillances
  - Radiological – 6
  - WIDS – 4

## MAJOR ISSUES

**Issue:**

Because of high winds on January 11, 2014, the roof structure over the “C” elevator counter weight area was blown off at 105KE Reactor. The section of roof that was removed left a hole approximately 2 ft. by 9 ft.

**Corrective Action:**

The roof that has been removed will be repaired to eliminate any biological or environmental issues.

**Status:**

Completed installation of corrugated roof panels over exposed opening. Foaming subcontractor will start applying roofing foam on June 5, 2014.

## RISK MANAGEMENT STATUS

Unassigned Risk  
Risk Passed  
New Risk  
Change

● Working - No Concerns  
● Working - Concern  
● Working - Critical

Increased Confidence  
 No Change  
 Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-0041</b>				
WSR-047: Unforeseen Waste Site Event	Perform routine surveillances and maintenance of waste sites including herbicide application.	<span style="color: green;">●</span>		No concerns.
KBC-043: Waste Site Remediation Completion Requirements	Regulator acceptance that cleanup criteria have been achieved on a waste site by waste site basis. The Project may be directed to install monitoring wells to determine if contamination is detected in ground water.	<span style="color: green;">●</span>		Installation of two additional KE Characterization wells. UPR-100-K1; 116-KE-3. Buy Back authorized \$1.1M (in 2014 FYSF). Awaiting DOE contract change order/modification to initiate change proposal and planning.
KBC-048: Unexpected Industrial Contamination	D-4 activities are conducted in accordance with CHPRC IH and Rad protection programs to minimize contamination spread. Prior to D&D activities, the existing and historical records are reviewed to identify areas of likely industrial contamination.	<span style="color: green;">●</span>		No concerns.
KBC-ISS-004: Unforeseen Facility Event Impacts Safety or Environment	The ISMS processes and facility worker training will identify and correct weaknesses such that hazards are eliminated prior to an event. However, some events are unpredictable.	<span style="color: yellow;">●</span>		Subcontractor mobilized and progressing to repair 105KE roof.

## 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	0.9	0.9	0.4	0.0	3.8%	0.5	58.0%

Numbers are rounded to the nearest \$0.1M

#### CM Schedule Performance (+\$0.0M/+3.8%)

The variance is within reporting threshold.

#### CM Cost Performance (+\$0.5M/+58.0%)

The current month favorable cost variance is due to the implementation of planned efficiencies in the Program Management accounts. The project is able to perform planned work while being able to direct resources to other CHPRC priority work scope. This is the result of aggressive resource sharing strategies across multiple PBSs.

## 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	307.1	307.1	281.4	0.0	0.0%	25.7	8.4%	393.1	368.4	24.7

Numbers are rounded to the nearest \$0.1M

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

The schedule variance is within threshold.

#### CTD Cost Performance (+\$25.7M/+8.4%)

The positive CTD cost variance is primarily the result of prior year activity that have been previously reported and CSNA sites that were completed early and under costs. In addition, less demolition was required for the KE Sedimentation Basin as well as underruns in G&A and Direct Distributables. This is partially offset by the cost overruns in prior years for the Utilities Project.

#### Variance at Completion (+\$24.7M/+6.3%)

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	FY2014		
	Projected Funding	Spending Forecast	Spend Variance
RL-0041	10.1	7.5	2.6

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis:

Projected Funding is unchanged from the prior month and remains at \$10.1M. The change in FY2014 Spending Forecast from \$7.6M to \$7.5M is within threshold.

### Critical Path Schedule

Critical Path Analysis can be provided upon request.

### Baseline Change Requests

BCR-PRC-14-010R0 - *CO #248 NTE, Implement DOE-0342, Rev 2A, Hanford Site CBDPP*

BCR-PRC-14-014R0 - *Incorporate Draft Revised Option Period Performance Measures*

BCRA-PRC-14-016R0 - *HPIC Updates May 2014*

## 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)



**L. T. Blackford**  
Vice President and  
Project Manager for  
Decommissioning, Waste,  
Fuels, and Remediation  
Services (DWF&RS)

May 2014  
CHPRC-2014-05, 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

Objective #	Objective	Target	Due Date	Status
14-EMS-DWF&RS-OB1-T1	Conserve resources and reduce the generation and/or toxicity of waste at the source.	Continue inspection and management review of material and equipment storage areas at frequencies determined necessary by line management to assure continued protection of property from loss, deterioration, or damage.	9/30/14	On Schedule

## 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
  - o Four Preventive Maintenance (PM) activities/operational surveillances
  - o Four radiological surveillances
- Continue to disposition material from the 440 Pad for excess/waste

## MAJOR ISSUES

**Issue** – Fire System devices are degrading due to the age of the equipment (e.g. pull-boxes, chimes)

**Corrective Action** – Work with the Fire System Maintenance organization to complete timely repairs of affected equipment.

**Status** – Continuing preparations of new work packages to perform repairs as resources become available.

### RISK MANAGEMENT STATUS

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

 Working - No Concerns  Increased Confidence  
 Working - Concern  No Change  
 Working - Critical  Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-0042</b>				
FFTF-012: Major Equipment or Structural Failure	FFTF suffers a major equipment failure or structural deterioration while in the Surveillance and Maintenance mode			Continuing Corrective Maintenance activities. No unplanned events encountered.

### 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)	-0.7%	0.1	53.0%

Numbers are rounded to the nearest \$0.1M

**CM Schedule Performance: (-\$0.0M/-0.7%)**

The current period schedule variance is within threshold.

**CM Cost Performance: (+\$0.1M/+53.0%)**

The current period cost variance is within threshold.

**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	17.4	17.4	14.8	(0.0)	-0.0%	2.7	15.4%	26.5	24.1	2.4

Numbers are rounded to the nearest \$0.1M

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

The schedule variance is within reporting thresholds.

**CTD Cost Performance (+\$2.7M/+15.4%)**

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

**Variance at Completion (+\$2.4M/+8.9%)**

The Variance at Completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

## FUNDS VS. SPEND FORECAST (\$M)

FY2014			
RL-0042 FFTF Closure	Projected Funding	Spending Forecast	Spend Variance
RL-0042	2.3	1.7	0.6

Numbers are rounded to the nearest \$0.1M

### Funds Analysis

Projected Funding and Spending Forecast are unchanged from the prior month.

### Critical Path Schedule

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

### Baseline Change Requests

BCR-PRC-14-010R0 - CO #248 NTE, Implement DOE-0342, Rev 2A, Hanford Site CBDPP

## 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



May 2014  
CHPRC-2014-05, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE

CLASSIFICATION (When Filled In)																
CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE											DOLLARS IN Thousands of \$		FORM APPROVED OMB No. 0704-0188			
1. CONTRACTOR			2. CONTRACT				3. PROGRAM				4. REPORT PERIOD					
a. NAME CH2M HILL Plateau Remediation Company			a. NAME Plateau Remediation Contract				a. NAME Plateau Remediation Contract				a. FROM (YYYYMMDD)  2014 / 04 / 21					
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788		b. PHASE		c. EVMS ACCEPTANCE NO YES X 9/18/2009			b. TO (YYYYMMDD)  2014 / 05 / 25						
c. TYPE CPAF			d. SHARE RATIO													
5. CONTRACT DATA																
a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		d. TARGET PROFIT/ FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING		i. DATE OF OTB/OTS						
	5,468,322	13,502		228,497	5,696,819	5,595,695	5,696,819	5,595,695								
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) Corman, R. K.			b. TITLE Prime Contract Manager					
a. BEST CASE		5,289,110						c. SIGNATURE			d. DATE SIGNED 5/25/2014					
b. WORST CASE		5,426,640														
c. MOST LIKELY		5,367,198		5,481,824		114,626										
8. PERFORMANCE DATA																
WBS[1]  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)						
011 RL-11 NM Stabilization and Disposition PFP	10,940	8,706	9,161	(2,234)	(455)	693,337	668,178	702,166	(25,159)	(33,988)	0	0	0	935,378	963,945	(28,567)
012 RL-12 SNF Stabilization and Disposition	5,591	5,596	5,584	5	12	418,463	418,313	427,416	(151)	(9,103)	0	0	0	692,566	708,597	(16,031)
013 RL-13 Solid Waste Stabilization & Disposition	9,024	9,711	7,795	687	1,916	847,444	848,032	818,372	589	29,660	0	0	0	1,342,656	1,266,954	75,702
030 RL-30 Soil & Wtr Remediatn Grndwtr/Vadose Zone	10,859	10,588	10,314	(271)	275	970,291	972,191	960,120	1,900	12,071	0	0	0	1,514,075	1,496,970	17,105
040 RL-40 Nuclear Facility D&D Remainder of Hanford	1,127	1,443	1,240	316	203	384,303	383,573	353,506	(729)	30,067	0	0	0	491,925	460,083	31,841
041 RL-41 Nuclear Facility D&D - River Corridor	852	885	372	33	513	307,114	307,127	281,417	13	25,711	0	0	0	393,123	368,412	24,711
042 RL-42 FFTF Closure	195	194	91	(1)	103	17,434	17,433	14,754	(1)	2,679	0	0	0	26,508	24,148	2,360
b. Cost of Money	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. Gen. and Admin.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. Undist. Budget																
e. Sub Total	<b>38,588</b>	<b>37,122</b>	<b>34,556</b>	<b>(1,466)</b>	<b>2,566</b>	<b>3,638,386</b>	<b>3,614,848</b>	<b>3,557,751</b>	<b>(23,538)</b>	<b>57,097</b>	0	0	0	<b>5,396,230</b>	<b>5,289,110</b>	<b>107,120</b>
f. Management Reserve														78,087		
g. Total	<b>38,588</b>	<b>37,122</b>	<b>34,556</b>	<b>(1,466)</b>	<b>2,566</b>	<b>3,638,386</b>	<b>3,614,848</b>	<b>3,557,751</b>	<b>(23,538)</b>	<b>57,097</b>	0	0	0	<b>5,474,318</b>		
9. Reconciliation to CBB																
a. Variance Adjustment																
b. Total Contract Variance									<b>(23,538)</b>	<b>57,097</b>				<b>5,474,318</b>	<b>5,289,110</b>	<b>185,208</b>

Block 5a-h differences, if any, to B.4-1 Table values are addressed by in-process BCR(s).

FORMAT 2, DD FORM 2734/2, ORGANIZATIONAL CATEGORIES

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 2 - ORGANIZATIONAL CATEGORIES											DOLLARS IN - Thousands of \$			FORM APPROVED OMB No. 0704-0188				
1. CONTRACTOR	2. CONTRACT				3. PROGRAM			4. REPORT PERIOD										
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract				a. NAME Plateau Remediation Contract			a. FROM (YYYYMMDD)										
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788				b. PHASE			2014 / 04 / 21										
	c. TYPE CPAF				d. SHARE RATIO			c. EVMS ACCEPTANCE NO YES X 9/18/2009										
								b. TO (YYYYMMDD) 2014 / 05 / 25										
5. PERFORMANCE DATA																		
ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE						REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST		VARIANCE		BUDGETED COST		ACTUAL COST		VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)	WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	WORK PERFORMED (9)	SCHEDULE (10)	COST (11)								
34 - Env Program & Strategic Planning	646	766	580	119	186	45,914	46,092	42,315	179	3,777	0	0	0	0	83,054	79,067	3,987	
340 - Environmental Prog & Regl Mgt	646	766	580	119	186	45,914	46,092	42,315	179	3,777	0	0	0	0	83,054	79,067	3,987	
35 - Business Services	0	0	0	0	0	23,047	23,047	23,520	0	(473)	0	0	0	0	23,047	23,520	(473)	
35D - Contract Mgmt & Facility Svcs	0	0	0	0	0	429,349	429,349	405,709	0	23,640	0	0	0	0	429,349	405,709	23,640	
35K - PRC Finance	0	0	0	0	0	452,396	452,396	429,230	0	23,167	0	0	0	0	452,396	429,230	23,167	
36 - Prime Cont & Project Integration	189	79	97	(110)	(17)	604	514	303	(90)	211	0	0	0	0	1,215	1,217	(2)	
362 - Strateg Pln & Mgmt	0	0	0	0	0	20,128	20,128	20,128	0	0	0	0	0	0	20,128	20,128	0	
363 - EVMS Compl & Rptg	189	79	97	(110)	(17)	20,731	20,642	20,430	(90)	211	0	0	0	0	21,343	21,345	(2)	
38 - Project Technical Services	0	0	0	0	0	(0)	(0)	0	0	(0)	0	0	0	0	(0)	0	(0)	
382 - Training & Procedures	2,223	2,348	2,327	125	21	33,179	33,293	52,890	114	(19,597)	0	0	0	0	89,739	117,414	(27,675)	
385 - K Annex Construction & ECRTS	2,223	2,348	2,327	125	21	33,179	33,293	52,890	114	(19,597)	0	0	0	0	89,739	117,414	(27,675)	
3B - PFP Closure	2,342	1,338	2,695	(1,004)	(1,356)	129,435	123,103	137,399	(6,332)	(14,296)	0	0	0	0	201,579	215,108	(13,528)	
3B0 - PFP Close/BOSS D&D & Infrastruc	3,257	1,487	1,820	(1,770)	(333)	128,006	120,516	128,962	(7,491)	(8,446)	0	0	0	0	185,771	195,982	(10,211)	
3B3 - Project Management/Subcontracts	1,786	1,786	1,295	0	492	41,282	41,282	35,980	(0)	5,302	0	0	0	0	74,095	68,683	5,413	
3B4 - Engrg Nuc Saf Ping&Wrk Control	834	1,103	835	270	269	49,115	49,348	40,117	233	9,231	0	0	0	0	73,244	65,890	7,355	
3B7 - Environmental & Waste	1,254	1,245	1,373	(8)	(127)	144,533	144,538	147,299	5	(2,761)	0	0	0	0	168,021	171,035	(3,014)	
3BA - Project Mgmt D&D	2,182	2,493	1,508	311	985	354,114	342,552	349,412	(11,561)	(6,860)	0	0	0	0	463,857	463,609	248	
3BB - PFP D4 Deputy Project Mgmt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3BD - PFP Cold & Dark	11,854	9,453	9,524	(2,201)	(71)	846,485	821,339	839,170	(25,146)	(17,830)	0	0	0	0	1,166,568	1,180,306	(13,738)	
3C - W&FMP/D&DD Project	3,369	3,248	3,257	(120)	(8)	335,714	335,450	328,626	(264)	6,823	0	0	0	0	553,257	545,284	7,973	
3AD - Sludge Treatment Project	2,771	2,740	1,836	(30)	905	187,666	187,602	195,102	(63)	(7,500)	0	0	0	0	318,432	312,506	5,926	
3C4 - Waste & Fuels Project Controls	0	0	0	0	0	49,140	49,140	52,386	(0)	(3,247)	0	0	0	0	49,140	52,386	(3,247)	
3C5 - TRU Project	3,514	3,723	3,230	209	493	173,606	173,806	163,342	200	10,464	0	0	0	0	399,436	377,131	22,306	
3C9 - Liquid & Fuels Storage	0	0	0	0	0	0	0	1	0	(1)	0	0	0	0	0	1	(1)	
3CA - W&FMP Engineering	4,010	4,942	3,973	932	969	716,717	716,528	673,851	(188)	42,678	0	0	0	0	979,384	913,936	65,448	
3CD - Waste Disposition	13,664	14,654	12,295	990	2,359	1,462,842	1,462,526	1,413,309	(316)	49,217	0	0	0	0	2,299,649	2,201,244	98,405	
3D - Soil & Groundwater Remediation	2,035	1,433	1,573	(603)	(141)	93,880	93,666	96,487	(213)	(2,821)	0	0	0	0	191,830	193,061	(1,232)	
3D0 - Soil & Groundwater Remediation	2,203	2,388	1,912	185	476	141,518	142,014	132,384	496	9,630	0	0	0	0	266,554	255,276	11,278	
3D2 - GW Remediation Support	1,453	1,448	1,216	(5)	232	92,960	92,956	79,693	(5)	13,262	0	0	0	0	164,429	150,775	13,654	
3D4 - GW Operations	4,521	4,554	5,033	33	(479)	448,479	449,923	451,842	1,444	(1,919)	0	0	0	0	660,669	661,393	(724)	
3D8 - GW Analysis and Reporting	10,213	9,823	9,734	(390)	89	776,838	778,559	760,406	1,721	18,152	0	0	0	0	1,283,481	1,260,505	22,977	
b. Cost of Money	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c. Gen. and Admin.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d. Undist. Budget	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
e. Sub Total	38,588	37,122	34,556	(1,466)	2,566	3,638,386	3,614,848	3,557,751	(23,538)	57,097	0	0	0	0	5,386,230	5,289,110	107,120	
f. Management Resrv.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78,087	0	78,087	
g. Total	38,588	37,122	34,556	(1,466)	2,566	3,638,386	3,614,848	3,557,751	(23,538)	57,097	0	0	0	0	5,474,318	5,289,110	107,120	

FORMAT 3, DD FORM 2734/3, BASELINE

May 2014 Monthly Report

CONTRACT PERFORMANCE REPORT													Form Approved					
FORMAT 3 - BASELINE						DOLLARS IN THOUSANDS					OMB No. 0704-0188							
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:			3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009					4. REPORT PERIOD a. FROM: 2014/04/21 b. TO: 2014/05/25							
5. CONTRACT DATA			a. ORIGINAL NEGOTIATED COST 4,312,366		b. NEGOTIATED CONTRACT CHANGE \$1,155,956	c. CURRENT NEGOTIATED COST (A + B) \$5,468,322	d. ESTIMATED COST AUTH UNPRICED WORK \$13,502	e. CONTRACT BUDGET BASE (C + D) \$5,481,824		f. TOTAL ALLOCATED BUDGET \$5,474,318		g. DIFFERENCE (E - F) \$7,506						
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2018		k. CONT COMPLETION DATE 9/30/2018											
6. PERFORMANCE DATA			BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)															
ITEM (1)			BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)
a. PM BASELINE (BEGIN OF PERIOD)			3,638,250	38,452	30,550	30,856	40,371	41,433	28,574	32,916	3,391,477	389,983	434,635	425,976	373,284	382,610	0	5,397,964
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																		
BCR-011-14-00030, Incorporation of Alternate Technical Approach												(2,078)	471	3,355				1,748
BCR-013-14-012R0, BCWS Change for 310 Retention/Transfer System FY14 LOE Activities												(0)						(0)
BCR-030-14-008R0, Incorporate Definitization of CO #237, 200-DV-1 Transient Perched Water.												(467)	912	864	937	(5,304)		(3,058)
BCR-030-14-011R0, 200-BP-5 Treatability Test Revision												(0)						(0)
BCR-030-14-012R0, Definitization of CO #238, 100-NR-2 Aquifer Barrier Expansion.												(185)	(1,290)	81	(1,014)	90		(2,319)
BCR-030-14-013R0, High Risk/Value Materials & Subcontracts Planning												0	0	0	0			0
BCR-030-14-014R0, Incorporate NTE for CO #254, CP Inner Area Cleanup Principles/Risk Assessment and Modeling Parameters Document												1,000						1,000
BCR-PRC-14-010R0, Incorporate NTE for CO #248, Implementation of DOE-0342, Rev 2A, Hanford Site Chronic Beryllium Disease Prevention Program												895						895
c. PM BASELINE (END OF PERIOD)			3,638,386	38,588	30,212	30,161	39,709	42,158	28,150	32,076	3,391,477	389,148	434,728	430,276	373,206	377,396	0	5,396,230
7. MANAGEMENT RESERVE																		78,087
8. TOTAL																		5,474,318

Block 5.g "Difference" is attributable to net delta of NTEs, G&A Allocations, B4 Table adjustments, and BCRs processed.

CONTRACT PERFORMANCE REPORT											CLASSIFICATION (When Filled In)	
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) 2014 / 04 / 21		
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788				b. PHASE			b. TO (YYYYMMDD) 2014 / 05 / 25		
			c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE YES 9/18/2009					
5. PERFORMANCE DATA (All figures in whole numbers of equivalent month. One equivalent month equals on person working one month)												
Organizational Breakdown Structure (OBS)  ITEM (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)								AT COMPLETION (15)	
			SIX MONTH FORECAST									
			+1 Jun (4)	+2 Jul (5)	+3 Aug (6)	+4 Sep (7)	+5 Oct (8)	+6 Nov (9)	FY15-18 (13)			
<b>300 - PRC Project Management</b>												
300 - Office of the President	6	432	5	5	5	5	5	5	5	5	214	678
	<b>6</b>	<b>432</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>214</b>	<b>678</b>
<b>303 - Internal Audit</b>												
303 - Internal Audit	4	290	4	4	4	4	4	4	4	4	180	494
	<b>4</b>	<b>290</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>180</b>	<b>494</b>
<b>304 - General Counsel</b>												
304 - General Counsel	4	277	4	4	4	4	4	4	4	4	180	482
	<b>4</b>	<b>277</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>180</b>	<b>482</b>
<b>31 - Communications &amp; Outreach</b>												
310 - Strategic Planning & Outreach	7	675	9	10	10	10	10	7	7	7	316	1,043
	<b>7</b>	<b>675</b>	<b>9</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>316</b>	<b>1,044</b>
<b>32 - Safety, Health, Security &amp; Quality</b>												
320 - Safety Health Security/Quality	24	1,902	26	25	25	25	25	25	25	25	1,105	3,156
321 - RAD PRO/Emergency Prep	8	761	8	8	8	8	8	8	8	8	374	1,185
322 - Nuclear Ops Supp & Compliance	5	695	7	7	7	7	7	8	8	8	341	1,080
324 - Quality Assurance	14	1,591	16	16	16	16	16	16	16	16	731	2,420
	<b>52</b>	<b>4,949</b>	<b>57</b>	<b>56</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>2,551</b>	<b>7,842</b>
<b>34 - Environmental Prog &amp; Strategic Planning</b>												
340 - Environmental Prog & Regl Mgt	40	2,153	41	41	41	39	44	44	44	44	2,162	4,563
341 - Environmental Protection	0	1,000	0	0	0	0	0	0	0	0	0	1,000
	<b>40</b>	<b>3,153</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>39</b>	<b>44</b>	<b>44</b>	<b>44</b>	<b>44</b>	<b>2,162</b>	<b>5,564</b>
<b>35 - Business Services</b>												
35D - Contract Mgmt & Facility Svcs	27	3,049	34	31	29	29	28	28	28	28	1,274	4,502
35F - Industrial Relations	4	344	4	4	4	4	5	5	5	5	214	583
35H - Human Resources	15	957	15	15	15	15	14	14	14	14	619	1,662
35K - PRC Finance	11	867	12	12	12	12	11	12	12	12	517	1,453
	<b>58</b>	<b>5,217</b>	<b>64</b>	<b>62</b>	<b>59</b>	<b>59</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>2,624</b>	<b>8,201</b>
<b>36 - Prime Contract &amp; Project Integration</b>												
360 - Prime Cont & Prj Integration	0	1	0	0	0	0	0	0	0	0	0	1
361 - Cont Compl & Change Mgmt	10	515	13	13	13	13	13	13	13	13	585	1,178
362 - Strategic Pln & Mgmt	19	1,199	22	22	22	23	19	19	19	19	855	2,180
363 - EVMS Compl & Rptg	14	1,232	16	16	16	16	14	14	14	14	630	1,953
	<b>44</b>	<b>2,948</b>	<b>50</b>	<b>50</b>	<b>50</b>	<b>52</b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>46</b>	<b>2,070</b>	<b>5,313</b>
<b>38 - Project Technical Services</b>												
381 - Central Engineering	7	525	9	11	10	10	9	9	9	9	419	1,004
382 - Training & Procedures	10	2,054	10	10	10	10	9	8	8	8	383	2,494
383 - Operations Programs	7	737	8	8	8	8	6	6	6	6	270	1,051
384 - Project Delivery	10	1,014	11	11	11	10	8	8	8	8	360	1,432
385 - K Annex Construction & ECRTS	42	1,451	42	42	39	39	49	49	49	49	1,391	3,101
	<b>77</b>	<b>5,781</b>	<b>80</b>	<b>81</b>	<b>78</b>	<b>78</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>81</b>	<b>2,823</b>	<b>9,082</b>
<b>3B - PFP Closure</b>												
3B0 - PFP Close/BOSS D&D & Infrastruc	90	4,539	77	62	83	82	52	53	53	53	1,701	6,648
3B3 - Project Management/Subcontracts	62	6,431	82	90	103	103	118	118	118	118	1,774	8,818
3B4 - Engrg Nuc Saf Plng&Wrk Control	56	1,852	56	59	58	58	79	79	79	79	1,289	3,528
3B7 - Environmental & Waste	29	2,512	30	30	34	34	39	42	42	42	785	3,506
3BA - Project Mgmt D&D	69	10,460	65	67	67	67	62	62	62	62	927	11,776
3BB - PFP D4 Deputy Project Mgmt	64	15,616	64	76	69	69	91	81	81	81	3,881	19,947
3BD - PFP Cold & Dark	0	0	0	0	0	0	0	0	0	0	0	0
	<b>370</b>	<b>41,412</b>	<b>373</b>	<b>384</b>	<b>412</b>	<b>411</b>	<b>439</b>	<b>434</b>	<b>434</b>	<b>434</b>	<b>10,356</b>	<b>54,223</b>
<b>3C - W&amp;FMP/D&amp;D Project</b>												
3AD - Sludge Treatment Project	125	14,810	124	125	125	125	155	155	155	155	7,096	22,715
3C4 - Waste & Fuels Project Controls	54	6,246	45	48	46	46	63	62	62	62	2,862	9,418
3C5 - TRU Project	0	582	0	0	0	0	0	0	0	0	0	582
3C9 - Liquid & Fuels Storage	144	10,280	151	156	148	144	152	148	148	148	7,637	18,815
3CD - Waste Disposition	146	32,799	153	160	148	135	151	151	151	151	8,348	42,043
	<b>470</b>	<b>64,717</b>	<b>473</b>	<b>488</b>	<b>467</b>	<b>451</b>	<b>520</b>	<b>515</b>	<b>515</b>	<b>515</b>	<b>25,942</b>	<b>93,573</b>
<b>3D - Soil &amp; Groundwater Remediation</b>												
3D0 - Soil & Groundwater Remediation	36	2,722	35	35	37	37	39	39	39	39	1,763	4,707
3D2 - GW Remediation Support	53	5,352	59	65	65	62	53	52	52	52	2,871	8,578
3D4 - GW Operations	50	4,609	54	54	52	53	56	56	56	56	2,540	7,472
3D8 - GW Analysis and Reporting	128	10,897	148	143	141	133	96	106	106	106	5,249	16,913
	<b>267</b>	<b>23,580</b>	<b>295</b>	<b>297</b>	<b>295</b>	<b>284</b>	<b>243</b>	<b>253</b>	<b>253</b>	<b>253</b>	<b>12,422</b>	<b>37,670</b>
<b>Grand Totals:</b>	<b>1,398</b>	<b>153,432</b>	<b>1,456</b>	<b>1,483</b>	<b>1,482</b>	<b>1,453</b>	<b>1,508</b>	<b>1,508</b>	<b>1,508</b>	<b>1,508</b>	<b>61,840</b>	<b>224,164</b>

**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		
<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>			<b>3. PROGRAM</b>		<b>4. REPORT PERIOD</b>		
<b>a. NAME</b> CH2M HILL Plateau Remediation Company		<b>a. NAME</b> Plateau Remediation Contract			<b>a. NAME</b> Plateau Remediation Contract		<b>a. FROM (YYYY/MM/DD)</b>  2014/04/201		
<b>b. LOCATION (Address and ZIP Code)</b>  Richland, WA 99354		<b>b. NUMBER</b> DE-AC06-08RL14788		<b>b. PHASE</b> Base		<b>b. TO (YYYY/MM/DD)</b>  2014/05/25			
		<b>c. TYPE</b> CPAF	<b>d. SHARE RATIO</b>	<b>c. EVMS ACCEPTANCE</b> 2009/09/18 NO YES X					
	<b>BCWS</b>	<b>BCWP</b>	<b>ACWP</b>	<b>SV in \$</b>	<b>SV in %</b>	<b>CV in \$</b>	<b>CV %</b>	<b>SPI</b>	<b>CPI</b>
Current:	38,588	37,122	34,556	(1,466)	-3.8%	2,566	6.9%	0.96	1.07
Cumulative:	3,638,386	3,614,848	3,557,751	(23,538)	-0.6%	57,097	1.6%	0.99	1.02
	<b>BAC</b>	<b>EAC</b>	<b>VAC in \$</b>	<b>VAC in %</b>	<b>TCPI</b>				
At Complete:	5,396,230	5,289,110	107,120	2.0%	1.03				
<b>Explanation of Variance/Description of Problem:</b>									
<b>Current Period Schedule Variance:</b> The variance is within reporting thresholds.									
<b>Current Period Cost Variance:</b> The variance is primarily attributed to realization of planned efficiencies in multiple projects.									
<b>Cumulative Schedule Variance:</b> The variance is within reporting thresholds.									
<b>Cumulative Cost Variance:</b> The variance is within reporting thresholds.									
<b>Impact:</b>									
<b>Current Period Schedule:</b> No significant impacts have been identified.									
<b>Current Period Cost:</b> Current period cost impacts have been incorporated into the lifecycle EAC.									
<b>Cumulative Schedule:</b> No significant impacts have been identified.									
<b>Cumulative Cost:</b> No significant impacts have been identified.									
<b>Corrective Action:</b>									
<b>Current Period Schedule:</b> No Corrective Actions are required.									
<b>Current Period Cost:</b> Corrective Actions in place to address current period impacts, if any, on the lifecycle EAC.									
<b>Cumulative Schedule:</b> No Corrective Actions are required.									
<b>Cumulative Cost:</b> No Corrective Actions are required.									
<b>Monthly Summary (to include technical causes of VARs, Impacts, and Corrective Action(s):</b>									
For May, the project was 3.8% behind schedule and 6.9% under planned cost. For FY2014, the project is 6.0% behind schedule and 7.4% under planned cost.									
Overall schedule performance in May was within reporting thresholds.									
Overall cost performance in May was primarily attributed to realization of planned efficiencies in multiple projects.									
Corrective actions underway for PFP, PBS RL-0011 to include continued utilization of HAMTC collective bargaining agreement Craft Alignment, which is trending to increased time on tools, starting to recognize increased time on respirator, which will ultimately result in increasing efficiencies and recovering the negative schedule variance on the PFP project. CHPRC is also pursuing a significant change in the current PFP safety basis and criticality analysis, which if approved would allow an increase to the currently allowed fissile inventory for loading gloveboxes outside the facility. This is expected to reduce the time required to clean out some of the remaining high gram gloveboxes prior to shipment to W&FM for storage. These changes will also increase the efficiencies of future work activities and are expected to enable additional recovery of the schedule variance seen to date. PFP is also refining the DSA to a D&D mode vs. an operations mode which will allow decommissioning of the facility through alternate means. Implementation of this refined strategy, assumes implementation of the previously noted proposed changes in the PFP safety basis and criticality analysis. This will result in re-sequencing demolition activities; stabilizing some materials with grout and other stabilizers; reconfiguring the ventilation system to isolate the PRF canyon from the rest of PFP and the provision of temporary ventilation to allow stabilization and removal of the duct level utilizing equipment rather than exposing workers to the difficult work environment found there. No other specific corrective actions are planned at this time.									

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

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

**Variance in Performance BAC and EAC:** The variance at complete (VAC) between the BAC and EAC this month is a +\$107.1 million and +2.0% and is within reporting thresholds.

**Format 1 and 3 Contract Data: Contract Price Adjustments**

CPs - In Process		
	Total Authorized Unpriced Work	\$13,502
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
<b>Grand Total Adjustments</b>		<b>\$13,502</b>

**Use of Management Reserve (MR) and Fee Activity:**

**Management Reserve Utilization**

BCR Number	Title	Fiscal Year	MR
BCR-011-14-00030	<i>Incorporation of Alternate Technical Approach</i>	2014 - 2018	-\$1,748K

Management Reserve decreased by a total of \$1,748K during May.

**Fee Activity**

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

There were no changes to Fee during May.

**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.

<b>Prepared by:</b> Project Control Staff	<b>Date:</b> 6/17/2014	<b>Approved by:</b>	<b>Date:</b>
--	---------------------------	---------------------	--------------

# 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

May 2014  
CHPRC-2014-05, 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

**V. M. Bogenberger**  
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
14-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 85% by compressing occupancy and vacating underutilized facilities. Remove 10 facilities from active occupancy status. Consolidate at PFP and eliminate 8 trailers.	09/30/14	39%
14-EMS-ADMIN-OB1-T2	Reduce depletion of environmental resources through material recycling.	Make field-released material available for reuse. Recycle office supplies and furniture from the 10 facilities per OB1-T1.	09/30/14	50%
14-EMS-ADMIN-OB2-T1	Reduce the generation and/or toxicity of waste at the source.	Incorporate waste minimization language into greater than 80% of CHPRC onsite/offsite event contracts. Train staff on Zero Waste events.	09/30/14	75%
14-EMS-ADMIN-OB3-T1	Maximize the acquisition and use of environmentally preferable products in the conduct of operations.	Implement new RL direct funded office supply initiative with GSA. Establish green catalogues with GSA supplier.	9/30/14	40%
14-EMS-PCPI-OB1-T1	Reduce the generation and/or toxicity of waste at the source.	Reduce the number and types of printers supported and maintained by 80 total. Improve ability to manage printing. Reduce toner, ink, paper, and energy use.	09/30/14	100%
14-EMS-PCPI-OB2-T1	Reduce Green House Gas emissions by reducing vehicle miles traveled.	Transition CHPRC users to Thin Client workstations for energy and other cost savings measures during FY2014. Complete transition of 275 current computer desktop workstations to the environmentally friendly Thin Client environment.	09/30/14	100%
14-EMS-PTS-OB1-T1	Reduce the potential generation and release of toxic and hazardous chemicals and materials.	Improve spill prevention program to reduce the potential for spills to the environment by use of spill prevention techniques, training, and surveillances.	09/30/14	56%

Objective #	Objective	Target	Due Date	Status
14-EMS-PTS-OB2-T1	Evaluate compliance with Universal Waste requirements and recycling efforts.	Ensure that PTS is adequately implementing Universal Waste accumulation and storage requirements, aerosol can recycling, and other forms of recycling efforts in an efficient and compliant manner. At the end of the year evaluate and develop trending and tracking effectiveness. Document in a MOP.	09/30/14	56%

## 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	7	5/27/2014 – Employee struck hand on desk shelf causing a contusion to the hand. 23400
Near-Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

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

- SHS&Q activities to provide support and technical services to all CHPRC projects and central management of crosscutting services. There were no SHS&Q Recordable injuries or First Aid cases during May.
  - o Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
    - Continued support of site-wide standards committees and site-wide steering committees.
    - Continue implementation of the Chronic Beryllium Disease Prevention Program (CBDPP) Revision 2A. Beryllium facility assessments and characterization sampling are being conducted. Beryllium facility assessments have been completed on 221 CHPRC facilities. Projects have begun posting the updated signs and labels and have been completed across the Plateau Remediation Company (PRC).
    - Continued partnering efforts with HPMC on reduction efforts for soft tissue injuries.
    - Continue to provide support to Soil and Groundwater Remediation Project (S&GRP) Sample Management group for the transition of IH sample processing from Waste Sampling and Characterization Facility (WSCF).
    - Continued support to Plutonium Finishing Plant (PFP) for use of the PremAire system to facilitate Deactivation & Decommissioning (D&D) activities in the Plutonium Reclamation Facility (PRF) canyon. Training on the system is underway.
    - Provided technical support to PFP for the apparent cause evaluation of the demister pipe event.

- Continued to provide technical support to Project Technical Services (PTS) for determination of appropriate respiratory protection for welding activities and activities associated with the application of fire protective coating.
- Provided technical support to the PTS Hazard Review Board for the 105KE roof work.
- Coordinating efforts for on-site vehicle safety training/briefing for Decommissioning, Waste, Fuels, and Remediation Services Project (DWF&RS).
- Continued working with Project Facility Chemical Custodians to complete qualification cards.
- Developing revised qualification card for OS&IH subcontractor oversight personnel.
- Participated in the May 2014 Hanford Safety Expo, receiving the award for Best Corporate Presence.
- Finalized CHPRC VPP Safety Improvement Plan.
- Provided support to the Leadership Impact Initiative Workshop – Tough Day at Work panel.
- o Radiological Control accomplishments:
  - Developed Design Phase ALARA Plan for the Waste Encapsulation Storage Facility Stabilization and Ventilation Project.
  - Facilitated Guzzler Training for PFP Radiological Control Technicians (RCTs) in response to stop work issue raised by facility personnel.
  - Provided support to PFP and S&GRP regarding portable instrumentation calibration issues related to the service provider (MSA/RSS).
  - Developed presentation for PFP workers on the importance of hand protection in helping prevent contaminated wounds.
  - Provided controller/evaluator support for several EP drill activities.
  - Developed radiological verification criteria for use when CHPRC loans ERDF containers to other Hanford contractors.
- o Nuclear Safety deliverables prepared and transmitted to RL in May include:
  - Documented Safety Analysis:
    - Letter, CHPRC-1401436, May 27, 2014, *Transmittal of the 2014 Annual Update to CP-14977, Revision 7, Plutonium Uranium Extraction Facility Documented Safety Analysis, and the Unreviewed Safety Question Determination Summary.*
    - Letter, CHPRC-1401451 dated May 27, 2014, *Transmittal of 2014 Annual Update to the Plutonium Finishing Plant Safety Basis and Unreviewed Safety Question Summary Report.*
    - Letter, CHPRC-1401887, dated May 28, 2014, *Transmittal of CP-55076, U Plant Facility Final Hazard Categorization, and the Unreviewed Safety Question Determination Summary.*
  - Letters received from RL in May include:
    - Letter, 14-NSD-0041\_RL, dated May 5, 2014, *Transmittal of the Waste Encapsulation and Storage Facility (WESF) 2013 Safety Basis Annual Update, Annual Unreviewed Safety Question Report, and List of Safety Basis Documents.*
    - Letter, 14-NSD-0056\_RL, Transmittal of CHPRC-02188, Revision 0, *Waste Encapsulation and Storage Facility (WESF) Stabilization and Ventilation Project Major Modification Determination, for Review and Approval.*
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
  - 238 Condition Reports (CRs) were screened in May:
    - No Significant issues identified
    - Three Adverse issues identified
    - 101 Track Until Fixed (TUF) issues identified
    - 34 Trend Only (TO) items identified

- 99 Opportunity for Improvement (OFI) items identified
- One issue Screened Out (factually inaccurate, duplicative of existing Condition Reports)
- 163 CRs administratively closed.
- 355 CR actions administratively closed.
- Provided lead analysis support to PFP in completion of Apparent Cause Evaluation for CR-2014-0493, *Potential Beryllium Contamination Introduced into Adjacent System*.
- Conducted SHS&Q-2014-WSA-13085, *Review a sample of completed “Track until Fixed” CRs to Evaluate the Appropriateness of the Corrective Actions Taken*.
- Coordinated teleconference with the DNFSB concerning concrete degradation of the WESF basin due to radiological conditions over time.
- Coordinated the DNFSB on-site review of the Sludge Treatment Project Status/Nuclear Safety initiatives.
- Forty-nine documents were provided in response to DNFSB requests.
- o Performance Assurance, Quality Assurance (QA), and Assessment accomplishments:
  - Assisted Safeguards and Security in issuing the annual SAS Self-Assessment.
  - Issued the Evaluation of the Sludge Treatment and Surveillance Project (ST&SP) of the Decommissioning, Waste, Fuels & Remediation Services, CH2M HILL Plateau Remediation Contract, SHSQ-2014-NSPEB-13323.
  - Assisted Project Technical Services to respond to the EM-wide Extent of Condition Review on Deferred Maintenance to meet the DOE-RL submittal date of June 6, 2014.
  - Attended Spring ISMS/QA EFCOG Operational Meeting at EM Headquarters in Washington D.C.
  - Initiated planning for 10 CFR 835, Subpart E, “Monitoring of Individuals and Areas,” surveillance activity scheduled for June and July.
  - Continued evaluations of completed management assessments and provided specific mentoring and feedback to assessors and responsible managers. Feedback was provided to help improve the quality, including clarity and readability of future reports.
  - At the request of WESF/CSB facility management, initiated planning for operations support to evaluate aspects of the Control of Equipment and System Status process.
  - Supported Project Technical Services in Start-up Readiness Activities and development of a readiness process for below hazard category 3 activities.
  - Submitted to RL the annual contractual deliverable of the *CHPRC Quality Assurance Program*, PRC-MP-QA-599.
  - Continued to work with the Hanford Site Hoisting and Rigging Committee’s special project group to determine the applicability of NQA-1, Part II, Subpart 2.15, Quality Assurance Requirements for Hoisting, Rigging, and Transportation of Items for Nuclear Power Plants, to the current scope of work here at Hanford.
  - Continued support of the Waste and Fuels organization in the procurement of a new calibration contractor for the sludge treatment project.
  - Provided a presentation at the Region X VPPPA Conference in Anchorage, Alaska on Suspect/Counterfeit Items.
  - Provided support to DOE-HQ in preparation of the upcoming OCRWM Audit.
- 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.
  - Status:** Implementing Revision 2a to support overall site implementation.
  - Action:** A Management Plan that documents how CHPRC will implement the CBDPP Revision

2A is now in effect. A Management Directive, documenting the interim controls required while beryllium facility assessments are being completed, is also in effect. Beryllium facility assessments and characterization sampling are being conducted. Beryllium facility assessments have been completed on 221 CHPRC facilities. Projects have completed posting the updated signs and labels.

- o **Issue:** Accident & Injury Reduction.  
**Status:** Continue investigating recent recordable and DART injuries to determine cause, prevention and reduction.  
**Action:** Developed briefing materials for supervisors to help them better understand and manage occupational injuries and illnesses; safety communication campaign emphasizing injury precursors and reduction techniques for common injury types; working closely with site medical provider to provide ergonomic review and recommendations to prevent strains and soft tissue injuries. Discussed concerns where HPMC is referring workers to offsite medical providers.
- o **Issue:** PFP Value Engineering (VE) Initiatives Path Forward.  
**Status:** Engaged PFP project personnel with SHS&Q central group SMEs.  
**Action:** Supporting PFP foaming initiative, supplied breathing air system upgrade, and new NDA equipment upgrades.

## Environmental Program and Strategic Planning (EP&SP)

### Environmental Protection

- **Compliance Status**

- **Ecology Central Waste Complex Box and WRAP Drum Release Enforcement**

- o Implementation of the required actions in the Ecology Agreed Order (AO) is nearly complete. Ecology agreed on the completeness of the Acceptable Knowledge workshop held in May. Progress on the last deliverable, covering of outside containers, continues on schedule. The ZDR-11 box will be dispositioned separately.

- **RCRA Permitting Progress**

- o A meeting was held with EPA on the CAFO-required RCRA closure plans. A significant amount of information on the process of creation and regulator input to this plans was described. EPA indicated that they will respond to RL on the presented information. On May 28, 2014, Ecology presented a general process for revising the sitewide RCRA permit. The path forward includes the use of permit content templates, workshops to resolve issues and the creation of manager teams to resolve disputes. Specific timing was not provided in the presentation.

- **Asbestos**

- o Communications have been held with EPA on the methods to be used for demolition of structures at PFP. Some asbestos contaminated material (ACM) has been proposed to be left in place (floor tile, ACM in a steel fire door, wallboard joint grout) as allowed in the regulations and described in the work plan. EPA will consider the approach and advise if modifications are needed.

- **Environmental Management System (EMS)**

- o A zero-waste company event was held for all employees to celebrate the VPP Star. Over 97% of all materials were diverted away from landfill as a result of the planning and recycling effort. An internal EMS audit was performed ahead of the July external recertification assessment. Three findings were noted relating to awareness and universal waste management. Corrective actions are in place to address each item.

- **Environmental Compliance & Quality Assurance (ECQA)**

- **Accomplishments**

- o Completed the internal independent assessment of the Environmental Management System. The report was issued May 27, 2014. Three findings and three Opportunities for Improvement were identified. MSA auditors accompanied ECQA on this audit.

- o A MOP evaluated archeological site 45BN1007. The S&GWP ECO determined that the site had been disturbed and contacted the MSA Cultural/Historical Resources and Curation organization and the WCH Environmental Compliance and Completion organization. WCH indicated that the excavation was created during remediation of WIDS site 600-379 and the disturbance to the site is attributed to remediation of WIDS site 600-379. Follow up will be managed between MSA and WCH and no actions are applicable to CHPRC.
- o A MOP was completed at PTS focusing on spill prevention (no issues were identified).

#### **Work in Progress**

- o ECQA is assisting MSA in their internal Independent Assessment of the EMS. The entrance meeting was held on May 29, 2014. Field work is to be completed on June 12, 2014.
- o Requirements were identified for 58 matrices in May, 2014. A total of 93 matrices have been now been completed. This process is in compliance with PRC-PRO-EP-52795, *Environmental Requirements Management*, with a focus on three facilities: PFP, T-Plant, and CWC.

#### **Business Services**

- **Acquisition Planning**

- o Assisting DWF&RS with revising final acquisition strategy for the Cs/Sr Capsule Dry Storage Project.
- o Supporting S&GRP and IH for offsite analytical services request for proposal to support WSCF shutdown.
- o Supported PFP with procurement of Non-Destructive Assay equipment.
- o Outreach events with small business vendors on potential work scopes at CHPRC.

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

- o The annual physical inventory of CHPRC property commenced in February encompassing 4,081 items valued at \$152,328,862. As of May 31, 2014, 63 percent of the items and 65 percent of the value has been accounted for with no reported losses.

- **Finance**

- o May month-end closing was completed on schedule with no cost suspensions.
- o Contract funding has been provided that is sufficient to continue uninterrupted operations through early July.
- o Replied to KPMG requests for data, in response to the FY2009 and FY2010 incurred cost audits.
- o Worked with RL Finance on draft Labor Review reconciliation of hours.
- o Responded to RL request to provide Unallowable Listing and Banking Reconciliation documentation.
- o Responded to RL's inquiry regarding spares activity related to RL's A123 Audit.

- **Human Resources**

- o CHPRC has kicked off the summer intern program by selecting 29 college interns. All but seven have started with the rest arriving by the end of June.
- o CHPRC has partnered with Washington State University Tri-Cities (WSUTC) to create a cooperative learning and internship program that will enable college students to receive career training with pay as they work with our professionals in their major fields of study. The program aligns with the Company's strategic staffing initiatives designed to create a source of highly-qualified, entry-level employees that possess skills critical to CHPRC's current and future success. CHPRC anticipates the hiring of students to begin in July 2014.

- **Labor Relations**

- o Labor Relations continues to work with PFP management on moving PFP from the Deactivation phase to the D&D phase.

- **Procurement**

- o Awarded/amended 97 contracts with a total value of \$5.35M. Additionally, awarded 214 new material purchase orders valued at \$1.1M to support ongoing project objectives.

- o At the end of the first 68 months of the PRC, procurement volume has been significant; \$2.0925B in contract activity has been recorded with approximately 49.7 percent, or \$1.04B, in awards to small businesses. This includes 6,499 contract releases, 16,802 purchase orders, and 201,425 P-Card transactions.
- o Completed and issued two Advance Planning Documents and sent one consent package to RL for review or approval.
- o CHPRC Procurement awarded a construction contract for Field Route Injection and Extraction Well Equipment scope for the Soil and Ground Water Project to a small veteran/women-owned hubzone contractor for \$678K as part of their small business outreach to locate qualified hubzone companies. The company will perform general construction activities for field routing of process equipment, HDPE transfer lines, and electrical power cables.

### Prime Contract and Project Integration (PC&PI)

- o In May, Prime Contracts Compliance received and processed four (4) contract modifications (numbers 251, 335, 339, and 341) from RL and reached agreement on Change Order 246 in Modification 303. Correspondence Review received and determined the distribution for 51 incoming letters/documents. The Prime Contracts Compliance Manager reviewed 35 outgoing correspondence packages.
- o Began planning for the closure of the Waste Sampling and Characterization Facility (WSCF) and transition of analytical services to off-site laboratories.
- o A PFP Whitepaper addressing excusable schedule delays was provided to RL on May 5, 2014.
- o A Request for Equitable Adjustment for STP changes in funding and work scope priorities and sequestration funding impacts was provided to RL on May 20, 2014.
- o One Notice of Change letter was provided to RL in May.
- o Informally notified that MSA would no longer provide TPA Integration Support. Began development of Notice of Change. RL to define responsibilities MSA will no longer perform and CHPRC will be responsible to perform.

### Change Proposal/REA Summary

Change Proposals submitted on or ahead of due date	Request for Equitable Adjustments	Supplemental Information submitted	Change Proposals definitized on or ahead of 180-day metric
4	1	1	1

- o Estimating & Program Support provided the following support to the Projects:
  - Plutonium Finishing Plant (PFP):
    - Awaiting RL's disposition of CO #240, PFP Chemical Hazard Investigation and Mitigation of Chemical Lines.
  - Sludge Treatment Project (STP):
    - In conjunction with the project, completed and submitted to RL, a Request for Equitable Adjustment related to the following:
      - o REA 012 1454, *Sludge Treatment Project Work Scope Priorities and Sequestration Impacts*, on May 20, 2014.
    - Continued support in the maintenance of the Basis of Estimate(s) associated with planning scenarios related to the RL-0012 Performance Measurement Baseline (PMB) and FY2015 baseline planning.
    - Provided support to the Annex Construction subproject by reviewing and developing estimates on the claims submitted by the subcontractor.

- Decommissioning, Waste, Fuels & Remediation Services (DWF&RS) Project
  - In conjunction with the project, completed and submitted to RL, proposals related to the following Change Orders:
    - o CO # 249, *Installation of Leachate Transfer Line from ERDF to 200 West P&T*, on May 8, 2014.
    - o Supplemental Information associated with CO#245, *Conceptual Design for the WESF K1/K3 Exhaust System Upgrade Project*, on May 22, 2014.
    - o CO # 253, *100-K Area Boreholes and Sampling Investigation*. On May 28, 2014.
    - o Held kick-off meeting for REAs for F0-39 Powders, 400 Area Waste Management Units, 200-ZP-1 Surveillance and Maintenance, and prospective CO#190, Transfer of 622S Lysimeter.
- Soil & Groundwater Remediation Project (S&GRP):
  - In conjunction with the project, completed and submitted to RL, a proposal related to the following Change Order:
    - o CO#255, *Installation, Operation and Maintenance of an Automated Water Level Monitoring Network (ALWN) in the 100-KR-4 and 100-HR-3 Operable Units*, on May 28, 2014.
  - Continued efforts to prepare a Change Proposal in response to the following directed Change Order:
    - o CO #254, *Central Plateau Inner Area Cleanup Principles / Risk Assessment and Modeling Parameters Document*.
  - Continued efforts to prepare a Request for Equitable Adjustment associated with constructive changes caused by the extended regulatory comment and review period associated with the development of the 300-FF- Operable Unit RI/FS and Proposed Plan. This request will be submitted to RL in June 2014.
  - Provided support to the project technical staff on May 8, 2014 by responding to questions from RL technical staff regarding the basis and rationale of several activities included in the performance approach to the proposal submitted in response to CO # 251, *Incorporate 200-UP-1 Uranium Treatment at the 200 West Pump and Treat Facility*. All responses received favorably with no further questions, and no identification of any estimate errors or omissions.
- o Estimating & Program Support provided the following support to the functional areas:
  - Safety, Health, Security and Quality:
    - In conjunction with the project, completed and submitted to RL, a proposal related to the following Change Order:
      - o CO #248, *Implement Requirements of DOE-0342, Revision 2A, Hanford Site Chronic Beryllium Disease Prevention Program*, on May 15, 2014.
  - o Estimating Systems Administration
    - Received a CHPRC labor and G&A forward pricing rate update and updated the labor pricing library in the Sage estimating database. In addition, updated the material pricing library in the Sage database.
    - Continued update efforts on the estimating procedure and guide.
    - Continued coordination of up versioning efforts for Sage to the SQL Server version. LMSI is building a server compatible with the upgraded software version.
- **EVMS Compliance and Reporting**
  - o Conducted mock EVMS interviews, which included Vice Presidents, Control Account Managers and Project Control personnel.
  - o Provided comments to RL on draft Baseline Update Guidance (BUG).

- o Completed guidance and kicked-off Annual Baseline Update, which will focus on project execution and Estimate to Complete values.
- **Strategic Planning and Integration**
  - o **Interface Management**
    - Continue to work issues on scope and interpretations of Usage-Base Services vs. Direct-Funded Services for J.3 #20 Fire & Emergency Response Services (Fire Protection System Inspection, Testing, and Maintenance).
    - J.3 Table Worktables
      - J.3-51 “*Property Systems*” continue to work with MSA and WRPS to revise Service Delivery Document
      - J.3-34 “*Biological Controls*” continue to work with MSA to revise Service Delivery Document
    - Provided management endorsement of the RFAR Phase II design and implementation value engineering proposal.
    - Worked with Prime Contracts to begin establishing an internal change control process for site manuals and site committee agreements.
    - Continue internal audit of the MSA Statements of Work that are applicable to J.3 Usage-Based Services.
    - Quarterly review and comment of J.13/J.14 tables.
    - In process Interface Documents:
      - HNF-23474 Rev. 2, *ICD Between CHPRC and JCI for Hazardous Energy Control*
      - HNF-46148 Rev.3, *ICD Between CHPRC and MSA for Water System Services*
    - Completed annual review of HNF-51261 Rev.0, AIA between CHPRC and MSA for Geophysical Logging Services.
    - Continue working on FY2014 Infrastructure & Services Alignment Plan (ISAP) draft review.
    - Continue to receive comments on and revise MOA HNF-49315 Agreement on Hanford Atomic Metal Trades Council (HAMTC) Seniority Related Discharges and Replacements.
    - Review and comment on Statement of Work for MSA IH Support for CHPRC Beryllium Facility Assessment & Characterization.
    - Revision of Service Level Agreement with ATL in progress.
    - Draft AIA for Specialized Equipment/Construction (PRC-AIA-MS-02137) in progress.
    - Validate appropriate application of AIA for Nuclear Safety Work Adjacent to WRPS Nuclear Facilities regarding Excavation Permit DAN14-0075.
    - Revision of Interface Management PRC-PRO-MS-10472 in progress.
    - Continued work on MSA TPA Integration support.
  - o **Information Management**
    - Initiated requirements gathering for Respiratory Protection Equipment Tracking automation
    - Supported Environmental program with Requirements Management matrices
    - Provided IT, event logistics, and facilitation support to company manager meetings, EZAC, PZAC, and Leadership Impact Initiative training
    - Provided support for VPP luncheon celebration, including logistics, set-up, tear-down, photography, sign-in and memento distribution, and other on-site assignments
    - Provided information clearance and release support for 100K, S&GRP, DWFRS, SHS&Q and PTS documents
    - Provided numerous IT support requests for cellular phone issues/questions, meeting set-up, network connections, and printing.
    - Installed 23 Thin Client workstations in support of FY14-EMS-PCPI-OB2-T1
    - Processed 13,562 Electronic Records into IDMS

**Project Technical Services (PTS)****• Central Engineering**

- o Participated in the teleconference with the DNFSB, RL, and the DWF&RS team to discuss potential degradation of the WESF pool cells concrete walls due to radiation.
- o Supporting DWF&RS in structural evaluation for placement of grout in the WESF hot cells.
- o Supported Environmental regarding WDOH Concerns on HEPA filter service life. Follow-on meetings with RL and WDOH will be held the first week of June.
- o The CSB Fire Hazards Analysis (FHA) was issued for review; comments have been received and are being incorporated.
- o Supported the WESF Stabilization and Ventilation project during the Kickoff meeting and Alternative Analysis.
- o Supporting RL in the review of the Draft Report of the Hanford Site-Wide Probabilistic Seismic Hazard Analysis. The study fulfills the requirement to develop an update to the PSHA.
- o MSA Fire Marshal Office (HFMO) comments are being incorporated into the 200W P&T Fire Hazards Analysis (FHA). Following incorporation, the document will be ready for final approval and issue.
- o The new CSB FHA will be sent out for final formal review during the next reporting period.
- o Participated in the MSA sponsored Value Engineering Study for the Radio Fire Alarm Reporter (RFAR) upgrade and replacement project.
- o Commenced development and review of a functional design criteria document for the ERDF Leachate Line to 200West Pump & Treat project.
- o The NDE Services contract was finalized and approved.
- o Supported MSA Fleet Maintenance in the repair of American LeFrance aerial ladder boom. The repair was completed and 3<sup>rd</sup> Party Inspection occurred May 16, 2014.
- o Supported MSA Fleet Maintenance in the repair of the 90 ton Manitowoc/Grove mobile crane. A crack on the bottom of the boom was confirmed using NDE.
- o Provided support for DWF&RS ETF originating NFPA 70 AHJ approval package to document AHJ approval of a robotic crawler that is used in conjunction with a camera to assess cover conditions at the LERF basins.
- o Provided support for 100K STP-ECRTS Annex construction originating NFPA 70 AHJ approval package to document AHJ approval for three ventilators.

**• Procedures and Training**

- o Kicked off Conduct of Operations Simulator project. Established plan of action to define needs and necessary components. Goal is to have a functional simulator by fall.
- o Implemented PPS mid-quarter release to support internal procedure reviews.
- o Supported 100K DSA implementation, which resulted in 42 canceled and 15 modified procedures.
- o Initiated implementation of Resource Coordinator positions.

**• Operations Program**

- o Conducted safety management program assessment of post maintenance testing at PFP, SGRP, and CPSM with no findings and one opportunity for improvement.
- o Assisted DWF&RS with the Fire Protection and Operations Drill program management assessment (WIPP Vulnerability).
- o Conducted safety management program work site assessment on 2WP&T Conduct of Operations: Independent Verification.
- o Supported annual Safety EXPO demonstrating the MOVERS and Talon emergency equipment capabilities.
- o Completed five full-up Emergency Preparedness drills.

- **Project Delivery**  
**S&GRP**

- o Completed the construction and turn over to operations of 4 wells in area 100D (ME-51, ME-52, ME-22 & MJ-05).
- o Construction at Well WJ-02 (area 100KW) is 90% complete.
- o Commenced with the fabrication of well racks for 100HX and 200E Pump & Treat Operations

**DWF&RS**

- o Completed the fire barrier sealing of wall penetrations in T plant. Work was completed under budget and ahead of schedule. (2014 FY CV+\$264K, SV+\$14.7K)
- o Completed the install of the metal sheeting to 105KE roof. Foaming is scheduled for early June.

**PTS Project Office**

- o Completed the solicitation and ultimate award on 2 additional construction force contracts to DGR Grant and RCS in support of PTS Construction activities. Both contractors are scheduled to field mobilize early June.
- o Finalizing RFP for NQA-1 construction services solicitation. Received 10 responses to EOI. RFP scheduled "on street" week of June 9, 2014 with an anticipated award date by August 28, 2014.

**Construction**

- o FWS Qualification Cards completed.
- o Training requirements for FWS are being standardized to ensure they are qualified to work in all areas of the site.
- o Construction is working with ISH to solve the issue of EJTA's and multiple General Contractors using the same sub-tier craft. Resolution will be complete June 5, 2014.
- o Construction is working with CHPRC facilities management to secure more space for an expanding contractor work force.

- **KW Annex Construction**

- o Initiated training for PTS FWS to be Responsible Managers.
- o Initiated mask issuance station to support PTS construction.
- o Complete Repairs to High Bay Walls and provided PM Documentation For PM-12-02.2N.2B.1 for Submittal to Contracts (Complete Structural Concrete)
- o Factory acceptance test procedure approved for Flanders HEPA units with a target for testing to initiate on June 17, 2014.

**Communications**

- **Internal**

- o Hosted an all-employee safety meeting to share recent safety accomplishments and celebrate the award of VPP Star status.
- o Produced a video highlighting an S&GRP efficiency that boosted treatment capacity by about 40 million gallons per year.
- o Produced four issues of the CHPRC Weekly Update, including manager messages from Terry Vaughn, Vice President of Safety, Health, Security, Quality; Rick Millikin, Vice President of Prime Contract and Project Integration; and Mel Hatcher, Chief Legal Counsel and Ethics Compliance Officer.
- o Hosted a series of quarterly fieldwork supervisor meetings across the projects and organizations.
- o Continued hosting roundtable meetings with CHPRC senior management and employees to invite worker feedback and maintain the free flow of information.

- **Public Relations**
  - o Issued press releases publicizing CHPRC's partnering with local small business to implement sustainable event practices and CHPRC's award of VPP Star status.
  - o Supported RL with inquiries regarding PFP pipe cutting incident, strontium source found at PFP, liquid from a waste box (determined to be rain water).
  - o CHPRC's VPP Star status was featured in Seattle Daily Journal of Commerce online.
  - o RL and CH2M HILL featured on their social media sites a CHPRC video showcasing efficiencies in groundwater treatment and CHPRC receiving VPP Star status.
- **Public Involvement**
  - o Planning is under way for two upcoming comment periods: 100-F/IU Operable Unit Proposed Plan and an Engineering Evaluation/Cost Analysis on Waste Encapsulation and Storage Facility capsules disposition.

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Office of the President	0.2	0.2	0.2	0.0	0.0%	(0.0)	-7.3%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	0.0	31.6%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	12.3%
Communications	0.1	0.1	0.1	0.0	0.0%	(0.0)	-23.6%
Safety, Health, Security and Quality	2.1	2.1	1.1	(0.0)	-0.8%	1.0	47.7%
Environmental Program and Strategic Planning	0.4	0.4	0.5	0.0	0.0%	(0.1)	-19.6%
Business Services	1.8	1.8	1.6	0.0	0.0%	0.1	7.5%
Prime Contract and Project Integration	2.1	2.1	1.7	0.0	0.0%	0.3	15.7%
Project Technical Services	0.7	0.7	0.8	0.0	0.0%	(0.1)	-9.3%
<b>Indirect WBS 000 Total</b>	<b>7.6</b>	<b>7.5</b>	<b>6.2</b>	<b>(0.0)</b>	<b>-0.2%</b>	<b>1.3</b>	<b>17.3%</b>

Numbers are rounded to the nearest \$0.1M.

#### Indirect WBS 000

**CM Schedule Performance: (-\$0.0M/-0.2%)**

Variance is within reporting thresholds.

**CM Cost Performance: (+\$1.3M/+17.3%)**

Variance is primarily due to lower than expected costs for Time Verification System and subcontract resources.

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

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)
Office of the President	1.4	1.4	1.5	0.0	0.0%	(0.2)	-12.9%	2.1
Internal Audit	0.5	0.5	0.4	0.0	0.0%	0.1	25.8%	0.8
General Counsel	0.9	0.9	0.7	0.0	0.0%	0.2	19.3%	1.4
Communications	0.6	0.6	0.7	0.0	0.0%	(0.1)	-10.9%	1.0
Safety, Health, Security and Quality	9.8	9.7	7.5	(0.1)	-0.6%	2.2	22.8%	14.9
Environmental Program and Strategic Planning	2.7	2.7	2.6	0.0	0.0%	0.2	5.6%	4.4
Business Services	11.8	11.8	10.6	0.0	0.0%	1.2	10.2%	18.2
Prime Contract and Project Integration	13.6	13.6	11.6	0.0	0.0%	1.9	14.1%	21.0
Project Technical Services	4.6	4.6	4.9	0.0	0.0%	(0.3)	-7.1%	7.1
<b>Indirect WBS 000 Total</b>	<b>45.9</b>	<b>45.8</b>	<b>40.6</b>	<b>(0.1)</b>	<b>-0.1%</b>	<b>5.2</b>	<b>11.4%</b>	<b>71.0</b>

Numbers are rounded to the nearest \$0.1M.

### Indirect WBS 000

#### FYTD Schedule Performance: (-\$0.1M/-0.1%)

Variance is within reporting thresholds.

#### FYTD Cost Performance: (+\$5.2M/+11.4%)

The favorable cost variance is primarily due to lower than expected costs for Time Verification System and B&O Home Office Cost estimate reductions in prior year assessments.

### Baseline Change Requests

BCR-PRC-14-014R0 – *Incorporate Draft Revised Option Period Performance Measures*

BCRA-PRC-14-016R0 – *HPIC Updates May 2014*

BCR-PRC-14-015R0 – *Environmental Requirements Management Software*

BCR-PRC-14-010R0 – *CO #248 NTE, Implement DOE-0342, Rev 2A, Hanford Site CBDPP*



## FY2014 G&A Analysis (\$M)

WBS 000 Project Services and Support	FY2014					
	FYTD BCWS	FYTD Actual	FYTD Variance (O)/U	FY2014 BCWS	FY2014 Forecast	FY2014 Variance (O)/U
Office of the President	1.4	1.5	(0.2)	2.1	2.4	(0.3)
Internal Audit	0.5	0.4	0.1	0.8	0.8	(0.0)
General Council	0.9	0.7	0.2	1.4	1.4	0.0
Communications	0.6	0.7	(0.1)	1.0	1.2	(0.2)
Safety, Health, Security and Quality	9.8	7.5	2.3	14.9	12.3	2.6
Env. Program & Strategic Planning	2.7	2.6	0.2	4.4	4.3	0.1
Business Services	11.8	10.5	1.2	18.2	17.7	0.5
Prime Contract and Project Integration	13.6	11.6	1.9	21.0	18.6	2.4
Project Technical Services	4.6	4.9	(0.3)	7.1	7.5	(0.4)
<b>General &amp; Administrative (G&amp;A)</b>	<b>45.9</b>	<b>40.6</b>	<b>5.3</b>	<b>71.0</b>	<b>66.3</b>	<b>4.7</b>
		<b>FYTD</b>			<b>FY2014</b>	
<b>G&amp;A Distribution</b>		<b>(38.4)</b>			<b>(68.5)</b>	
<b>G&amp;A Liquidation (Over)/Under</b>		<b>2.1</b>			<b>(2.2)</b>	

### Liquidation Analysis

- Fiscal year to date through May, application of the G&A rate has under-liquidated total to date G&A costs by \$2.1M. The FY2014 year end projected overliquidation of \$2.2M reflected in the fiscal year spend forecast reflects revised funding guidance which significantly increased the G&A base.
- Consistent with CHPRC prospective Cost Accounting Disclosure Statement, under liquidations would be distributed to users at a minimum, when the combined (including Continuity of Service (COS) and Absence Adder rates) projected year end under liquidation is equal to or greater than \$4M. Over liquidations would be distributed to users at a minimum, when the combined projected year end over liquidation is equal to or greater than \$6M. Variances may be liquidated to users at lower thresholds if variances are determined to be significant to cost control. All remaining variances will be distributed at fiscal year end.

### MAJOR ISSUES

None identified.

### MILESTONE STATUS

None 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.