

# Monthly Performance Report

December 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**

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**APPROVED**

*By Ashley R Jenkins at 11:59 am, Jan 26, 2015*

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Release Approval

Date

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**J. A. Ciucci**  
**President and Chief**  
**Executive Officer**

# Monthly Performance Report

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

**December 2014**  
CHPRC-2014-12, Revision 0

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## EXECUTIVE SUMMARY

- December wrapped up a year of safe and compliant progress across CH2M HILL Plateau Remediation Company projects.
- In December, Plutonium Finishing Plant (PFP) crews began size reducing glove box WT-2 inside 242-Z. That glove box remains heavily contaminated following the 1976 explosion inside the glovebox that hurt Harold McCluskey, who was working inside. Crews also safely repaired the bridge motor for the Plutonium Reclamation Facility (PRF) canyon crane and returned the crane to operation. An operable PRF canyon crane is required to complete preparation of the PRF canyon for demolition.
- Decommissioning, Waste, Fuels and Remediation Services (DWF&RS) and Project Technical Services (PTS) completed the shop fabrication of stainless exhaust ductwork, fire protection sprinkler piping and hydronic piping for the Sludge Treatment Project (STP) K West Annex. Crews also framed the wall and installed dryboard between the High-Efficiency Particle Absorber (HEPA) and mechanical rooms. The project also completed fabrication of the STP Engineered Container Retrieval and Transfer System (ECRTS) ingress/egress transport cart.
- During December, the Soil and Groundwater Remediation Project (S&GRP) completed drilling of the two uranium extraction wells for the uranium treatment expansion at the 200W Pump-&-Treat Facility. The project also increased pumping rates at all three 100-KR-4 Operable Unit pump-and-treat systems through optimization activities and bringing new wells on line. The 100-KX system is successfully operating with all resin vessels loaded with SIR-700 resin and split-train operations in place.
- Prime Contract and Project Integration (PC&PI) and Estimating Support Services (ESS) successfully completed the close-out meeting for the KPMG Estimating System Audit on December 8, 2014.

**A PFP worker removes a portion of the “face” of the glove box that ruptured in 1976. Inside the glove box, pipes mangled in the explosion are visible.**

**A view of the new wall between the HEPA and mechanical rooms at the K West Annex.**

- The S&GRP hosted the December 2014 President’s Zero Accident Council (PZAC) meeting. The three main themes for the meeting were:
  - o Holiday Stress Management
  - o Sharing the Road
  - o Unattended Vehicles

The December PZAC included a presentation by Hanford Patrol on safe winter driving tips to steer the audience away from reckless habits on wet, slushy and icy roadways. Tips included leaving plenty of room between cars when braking, know road conditions and regional weather patterns, and above all else – slow down! Techniques for managing the stress of driving, and other assorted holiday hazards, were discussed by the site Behavioral Health Services. Their presentation provided pointers to avoid excessive holiday expectations which can lead to sleep loss, unhealthy consumption urges, and family tension. Next, the meeting participants were reminded that warming up a vehicle while unattended is allowed with the use of simple rules, such as chocking tires, using the parking brake properly, and visual monitoring. The theme of vehicle safety continued with a discussion on reducing road rage, sharing the road, and keeping cool in congested traffic through earlier departure times, alternate routes, and showing a little compassion. The remainder of the PZAC meeting including updates and announcements on core programs and topics:

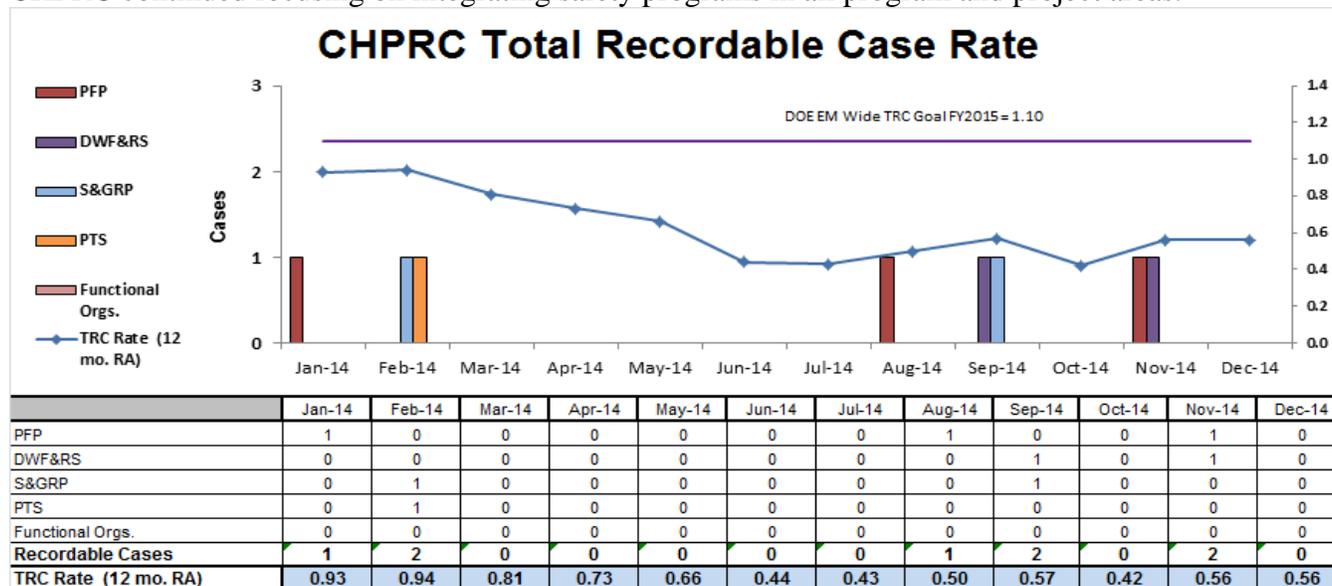
- o A report describing the lessons learned from an injury where an employee significantly pinched a finger in a roll up door
- o An Environmental Management presentation on repurposing: taking one thing and using it for something else before it goes through any breakdown and reformation
- o Voluntary Protection Program (VPP) update highlighting a revised employee survey to capture the health of the program and the development of the annual report
- o Injury and illness performance review
- o Good News Stories highlighting continued community efforts in the “After School Matters” outreach project
- o An Ethics Share on valuing diversity in a month rich with a variety of multinational, religious and secular holidays
- o Stretch and Flex
- Five December “*Thinking Target Zero*” (TTZ) bulletins were published in December to convey important occupational safety, health and environmental messages:
  - o Reduced Visibility
  - o Energy Conservation
  - o Holiday Health
  - o VPP Health and Safety Training
  - o Winter PPE Protection
- December *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
  - o Safety Refocus – Returning to Work After the Holiday Break
  - o Hazardous Walking Surfaces
  - o Respiratory Protection Issues and Concerns
  - o Safe Holiday Practices
  - o Calling 9-1-1
  - o Asbestos Control Procedure Changes
  - o Vehicle Safety – Warming Up Vehicles



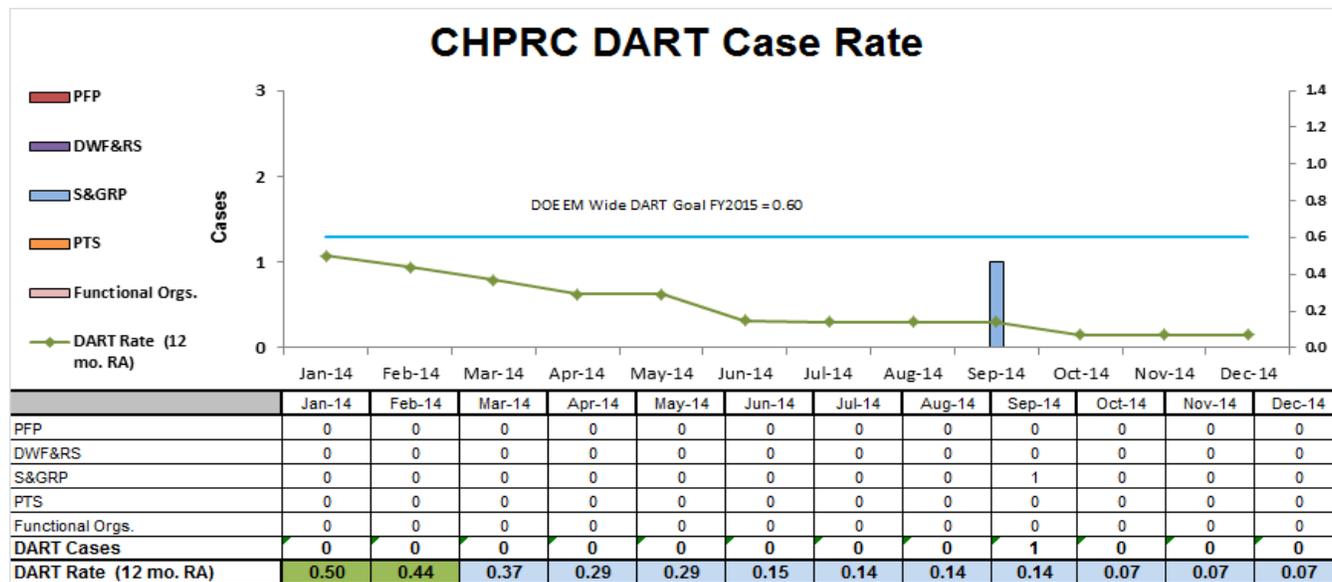
- o Winter Travel
- o Holiday Decorations
- o Tire Safety
- o Snow Shovel Safety
- o “What Would You Do?” Ethics Awareness messages
- o Injury/Illness Summaries and the TTZ of the week
- Weekly Updates in December featured blogs from Terry Vaughn, Vice President of Safety, Health, Security & Quality, Tom Ruane, Director of Safeguards and Security, and Terry Whitcomb, a CHPRC Millwright. Mr. Vaughn welcomed employees back from the holidays and encouraged work teams to take a moment to refocus on safety, watch out for each other, work with deliberate speed, and if something doesn't feel safe - don't do it. Tom Ruane reminded the workforce of the need for additional care and rigor needed to maintain security expectations with Hanford pictures and videos in a world of increasing popularity in social media. Terry Whitcomb discussed the After School Matters community outreach program that teaches children hazard prevention through hands-on exercises.
- The December Kudos Corner recognized individuals who made a significant contribution to safety at work, home or play:
  - o An employee who recognized facility ventilation had shut down and warned management so the problem could be fixed
  - o Three employees who spread ice melt and alleviated a slip or fall when icy conditions were particularly treacherous
  - o Building wardens who responded very well in a recent Hanford site take cover
  - o An employee who saw a worker at a drugstore use a ladder and recommended the help of a spotter
  - o A field work supervisor whose questioning attitude allowed the appropriate precautions to be taken

## TARGET ZERO PERFORMANCE December 2014

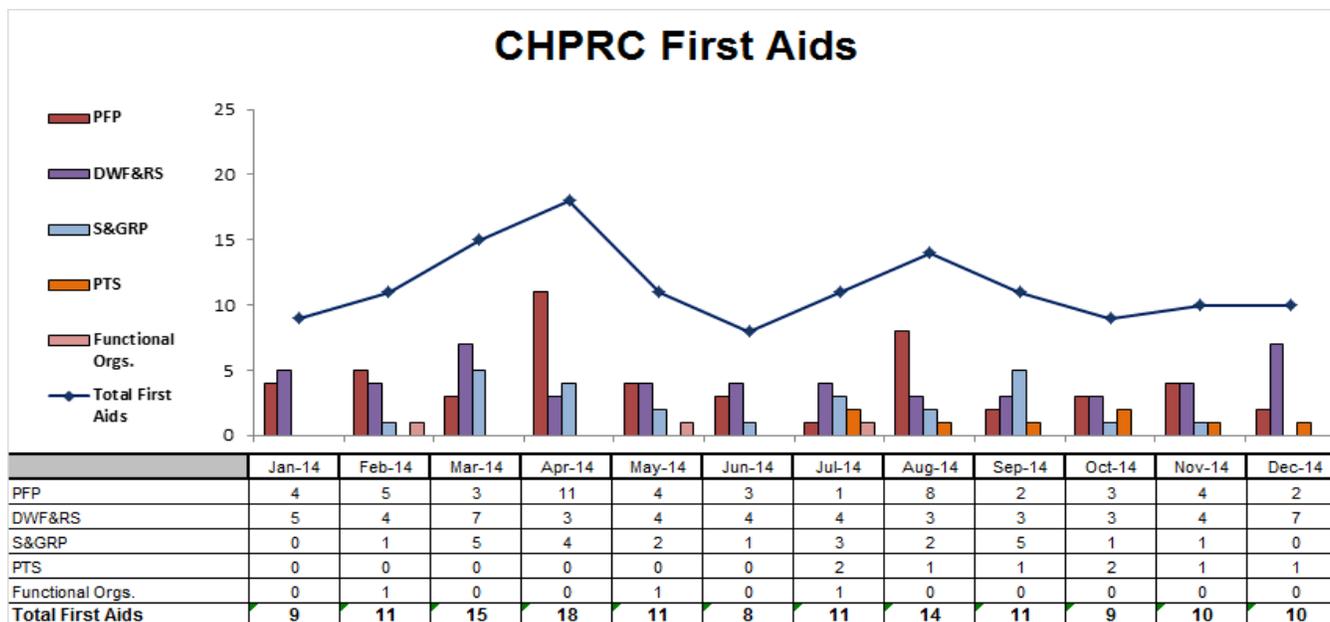
CHPRC continued focusing on integrating safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate – The 12 month rolling average TRC rate of 0.56 is based on a total of eight Recordable injuries. There were no Recordable cases in December. There are no cases currently being evaluated/investigated for potential recordability.



Days Away, Restricted or Transferred (DART) Workdays Case Rate – The 12 month rolling average DART rate of 0.07 is based upon a total of one Days Away case. There were no DART cases in December.



First Aid Case Summary – CHPRC reported ten first-aid cases in December 2014; of these ten cases, four cases required no treatment. There were two self-treated injuries. The contributors were six sprains / strains / pains, two abrasions / contusions, and two cuts / lacerations.

## KEY ACCOMPLISHMENTS

### Projects

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

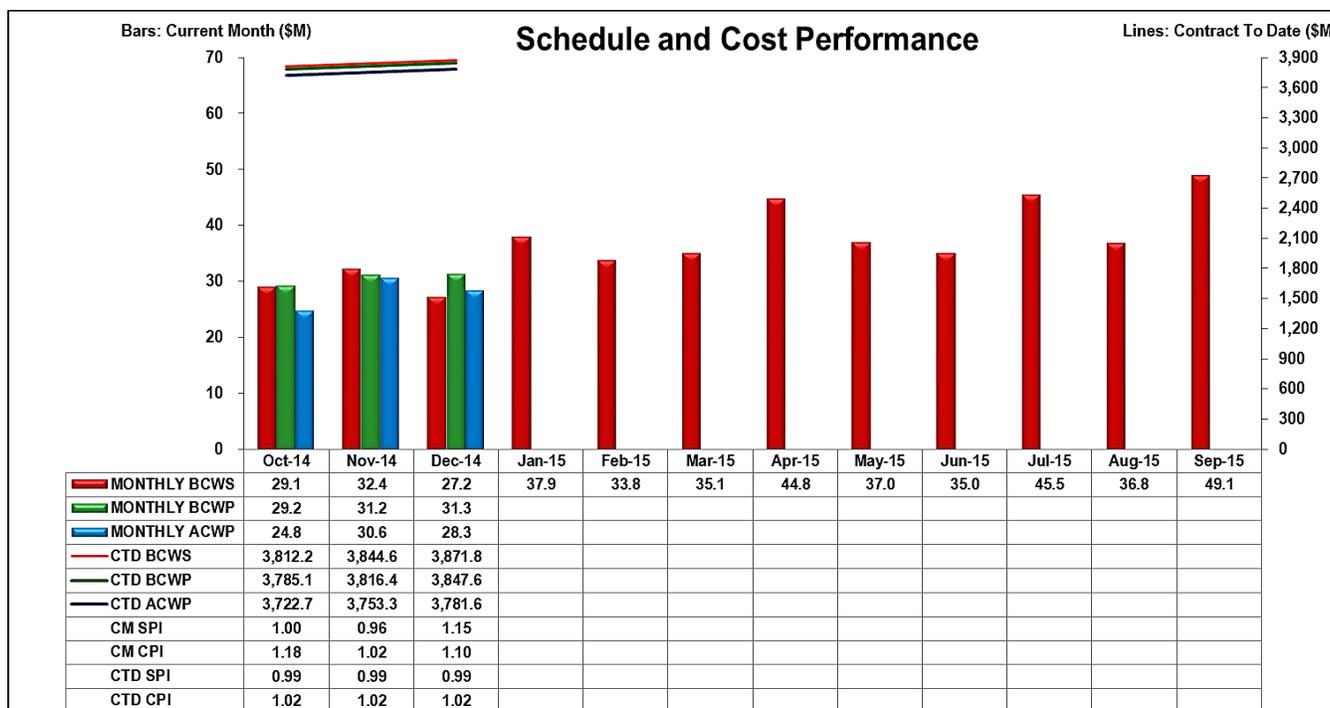
### Project Services and Support

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

## MAJOR ISSUES

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

## EARNED VALUE MANAGEMENT



	\$M						\$M					\$M			
	Current Period						Contract to Date					Contract Period			
	Budgeted Cost		Actual Cost	Variance			Budgeted Cost		Actual Cost	Variance			BAC	EAC	Variance
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance		
RL-0011 - Nuclear Materials Stab & Disp PFP	8.8	8.0	8.3	(0.9)	(0.3)	755.7	724.9	762.0	(30.8)	(37.0)	937.6	967.0	(29.5)		
RL-0012 - SNF Stabilization & Disposition	5.2	4.2	4.4	(0.9)	(0.1)	453.2	457.9	470.6	4.7	(12.7)	692.7	720.2	(27.5)		
RL-0013 - Solid Waste Stab & Disposition	7.6	8.4	6.0	0.8	2.3	900.3	902.2	863.0	1.9	39.2	1,352.7	1,263.7	89.1		
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	4.3	9.6	8.6	5.3	1.1	1040.7	1041.1	1026.6	0.4	14.5	1,523.7	1,471.7	52.0		
RL-0040 - Nuc Fac D&D - Remainder	0.7	0.7	0.7	(0.0)	(0.0)	391.7	391.6	360.9	(0.2)	30.7	470.0	438.8	31.2		
RL-0041 - Nuc Fac D&D - RC Closure Project	0.4	0.2	0.3	(0.2)	(0.0)	311.5	311.3	283.3	(0.1)	28.1	394.7	364.9	29.8		
RL-0042 - Nuc Fac D&D - FFTF Project	0.1	0.1	0.1	(0.0)	0.1	18.6	18.6	15.3	(0.0)	3.3	26.6	20.1	6.5		
(Numbers are rounded to the nearest \$0.1M)	<b>Total</b>	<b>27.2</b>	<b>31.3</b>	<b>28.3</b>	<b>4.1</b>	<b>3.0</b>	<b>3,871.8</b>	<b>3,847.6</b>	<b>3,781.6</b>	<b>(24.1)</b>	<b>66.0</b>	<b>5,398.0</b>	<b>5,246.4</b>	<b>151.6</b>	

### Performance Summary

CHPRC continues to track completion of contract scope within budget and is currently projecting a Variance at Completion of \$151.6 million with \$78.4 million of Management Reserve for a total positive variance of \$230 million.

For December, the project was 14.9% ahead of schedule and 9.4% under planned cost. For FY2015, the project was 3.5% ahead of schedule and 8.7% under planned cost. The schedule variance was primarily attributed to S&GRP efficient use of sample collection and analysis from streamlined requirements, replanning of 100-NR-2 appetite barrier expansion and injection activities to account for delays in receiving required cultural and ecological reviews and early completion of various activities. The cost variance was primarily due to implementation of planned efficiencies across multiple projects.

## FUNDING ANALYSIS

### FY2015 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2015		Variance
		Projected Funding	Spending Forecast	
RL-0011	Nuclear Materials Stabilization and Disposition	118.4	117.6	0.8
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	81.7	79.8	1.9
RL-0013	Waste and Fuels Management Project	86.6	80.9	5.6
RL-0030	Soil, Groundwater and Vadose Zone Remediation	137.8	136.9	1.0
RL-0040	Nuclear Facility D&D, Remainder of Hanford	12.5	12.2	0.3
RL-0041	Nuclear Facility D&D, River Corridor	6.8	8.2	(1.4)
RL-0042	Fast Flux Test Facility Closure	1.4	1.3	0.1
<b>Total Base:</b>		<b>445.1</b>	<b>436.9</b>	<b>8.2</b>

#### Funds/Variance Analysis:

FY2015 expected funding did not change in January, and remains at \$445.1M. Overall, the Spending Forecast includes actions anticipated to achieve the funding targets, however PBS RL-0041 has an updated estimate on the Boreholes which will require coordination with RL to resolve the projected funding issue.

## BASELINE CHANGE REQUESTS

In December 2014, CHPRC approved and implemented eight (8) BCRs impacting the PMB. The Change Requests are identified in the table below:

Change Request #	Title	Summary of Change
<b>Implemented into the Earned Value Management System</b>		
BCR-012-15-002R0	<i>Convert STSC Planning Package to Work Package</i>	This BCR modifies baseline activity 12.16.02.05.0010C – Containerized Sludge - Procurement of Transportation System (STSCs) from a Planning Package (PP) into detailed Work Packages (WP) based upon award of the STSC vessel contract which provided a detailed schedule for execution of the work. This BCR did not change the PMB value.
BCR-013-15-002R0	<i>FY2015 Shipment/Repackaging of Large TRU Waste Box from CWC</i>	This BCR adds scope to the PMB to incorporate authorization from RL to proceed with the shipment of a 43.4m <sup>3</sup> Large Suspect TRU waste box from the Central Waste Complex to Permafrix Northwest (PFNW), its repackaging by PFNW, and its' return to CHPRC. This scope addition is offset by the removal of an equal amount from WBS 013.011.01.01 Effluent Treatment Facility, FY2018 scope as authorized by RL. This BCR did not change the PMB value.
BCR-013-15-003R0	<i>Cs/Sr Dry Storage Planning Package Adjustment</i>	This BCR defers the start of the Cs/Sr Planning Package (PP) from January 1, 2015 to June 1, 2015 as the current FY2015 Integrated Priority List (IPL) does not support funding for this activity in FY2015. This additional delay in the start of the PP will allow additional time to finalize the path forward of the Cs/Sr Capsule Dry Storage Project. This change increased the PMB by \$76K.

Change Request #	Title	Summary of Change
BCR-013-15-004R0	<i>T Plant Ramp-up and Base Operations</i>	This BCR modifies WBS 013.08.01.01.08 – T Plant Ramp Up for Sludge Operations and 013.08.01.01.01 – T Plant Base Operations to better define the scope and the required resources for FY 2015. This update modifies the scope of the activities to reflect a shorter duration for the T Plant Base Operations and reduces the scope for the ramp up to reflect a reduced level of training required. This BCR did not change the PMB value.
BCR-030-15-007R0	<i>Re-Plan of 100-NR-2 Apatite Barrier Expansion and Jet Injection Activities</i>	This BCR incorporates RL direction to re-plan the PMB to delay the start of execution of the 100 NR-2 apatite barrier expansion and jet injection activities until FY2017. This delay was caused by the delay of approval of the associated cultural resource review. This BCR increased PMB by \$856K.
BCR-030-15-008R0	<i>CO#261, Design and Construction of Unloading Station and Transfer Tank</i>	This BCR incorporates scope associated with Change Order (CO) #261, Design and Construction of an Unloading Station and Transfer Tank at 200 West Pump and Treat to Support the 200-DV-1 Transient Perched Water Extraction System, Not to Exceed (NTE) amount of \$250K authorized via contract modification (CM) 365. This change increased the PMB by \$250K.
BCR-030-15-009R0	<i>CO#262, 200W P&amp;T System Membrane Bioreactor Additions</i>	This BCR incorporates CO #262, 200 West Pump and Treat System – Membrane Bioreactor Additions, scope associated with the NTE amount of \$6,000K authorized via CM 367 and CM 372. This BCR increased the PMB by \$520K.
BCR-030-15-010R0	<i>CO#264, 200-UP-1 Uranium Treatment Inside 200W P&amp;T Facility</i>	This BCR incorporates scope associated with CO #264, 200-UP-1 Uranium Treatment Inside 200 West Pump and Treatment Facility, NTE amount of \$1,000K authorized via CM 374. This BCR increased the PMB by \$1,000K.
BCR-PRC-15-015R0	<i>Undistributed Budget Adjustments December 2014</i>	This BCR incorporates changes to Undistributed Budget for baseline changes processed and contract modifications received during the month of December. This change decreased the PMB by \$5,070K.

Overall, the contract Performance Measurement Baseline budget decreased \$2,368K.

#### Management Reserve Activity

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

There were no changes to Management Reserve during December.

#### Fee Activity

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

There were no changes to Fee during December.

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):

### December 2014 Summary of Changes

	FYs 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
<i>November 2014 Estimate</i>									
PMB	3,391,477	391,653	455,382	439,056	357,470	365,316	2,008,878	5,400,354	5,400,354
MR	0	0	6,285	21,000	20,506	30,649	78,440	78,440	78,440
Fee	155,504	14,325	13,501	19,800	8,800	16,573	72,999	228,503	228,503
<b>Total</b>	<b>3,546,981</b>	<b>405,978</b>	<b>475,168</b>	<b>479,856</b>	<b>386,776</b>	<b>412,539</b>	<b>2,160,316</b>	<b>5,707,297</b>	<b>5,707,297</b>
<i>December 2014 Change</i>									
<b>PMB</b>									
Change to PMB	0	0	-11,633	-2,752	13,674	-1,656	-2,368	-2,368	-2,368
<b>MR</b>									
Change to MR	0	0	0	0	0	0	0	0	0
<b>Fee</b>									
Change to Fee	0	0	0	0	0	0	0	0	0
<b>Total Change</b>	<b>0</b>	<b>0</b>	<b>-11,633</b>	<b>-2,752</b>	<b>13,674</b>	<b>-1,656</b>	<b>-2,368</b>	<b>-2,368</b>	<b>-2,368</b>
<i>December 2014 Estimate</i>									
PMB	3,391,477	391,653	443,749	436,304	371,144	363,660	2,006,510	5,397,986	5,397,986
MR	0	0	6,285	21,000	20,506	30,649	78,440	78,440	78,440
Fee	155,504	14,325	13,501	19,800	8,800	16,573	72,999	228,503	228,503
<b>Total</b>	<b>3,546,981</b>	<b>405,978</b>	<b>463,535</b>	<b>477,104</b>	<b>400,450</b>	<b>410,882</b>	<b>2,157,949</b>	<b>5,704,929</b>	<b>5,704,929</b>

### Changes to/Utilization of Management Reserve in December 2014

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
<i>November 2014 MR Totals</i>								
RL-0011	0	0	1,052	8,000	8,000	0	17,052	17,052
RL-0012	0	0	2,000	3,000	5,000	3,897	13,897	13,897
RL-0013	0	0	1,000	2,000	800	6,824	10,624	10,624
RL-0030	0	0	832	3,000	2,006	8,828	14,666	14,666
RL-0040	0	0	700	1,500	1,800	4,000	8,000	8,000
RL-0041	0	0	600	3,450	2,800	7,000	13,850	13,850
RL-0042	0	0	100	50	100	100	350	350
<b>Total</b>	<b>0</b>	<b>0</b>	<b>6,284</b>	<b>21,000</b>	<b>20,506</b>	<b>30,650</b>	<b>78,440</b>	<b>78,440</b>
<i>December 2014 MR Changes/Utilization</i>								
RL-0011	0	0	0	0	0	0	0	0
RL-0012	0	0	0	0	0	0	0	0
RL-0013	0	0	0	0	0	0	0	0
RL-0030	0	0	0	0	0	0	0	0
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	0	0	0	0
RL-0042	0	0	0	0	0	0	0	0
<b>Total</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>
<i>December 2014 MR Totals</i>								
RL-0011	0	0	1,052	8,000	8,000	0	17,052	17,052
RL-0012	0	0	2,000	3,000	5,000	3,897	13,897	13,897
RL-0013	0	0	1,000	2,000	800	6,824	10,624	10,624
RL-0030	0	0	832	3,000	2,006	8,828	14,666	14,666
RL-0040	0	0	700	1,500	1,800	4,000	8,000	8,000
RL-0041	0	0	600	3,450	2,800	7,000	13,850	13,850
RL-0042	0	0	100	50	100	100	350	350
<b>Total</b>	<b>0</b>	<b>0</b>	<b>6,284</b>	<b>21,000</b>	<b>20,506</b>	<b>30,650</b>	<b>78,440</b>	<b>78,440</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 - 12/31/2014				Projection to FY2018	
Reporting Category				Planned Subcontracting:	\$2,406,850,560
				Contract-to-date awards:	\$2,169,784,662
				Bal remaining to award:	\$237,065,898
	\$ Value	%	Goal %	Goal award\$	Bal to Goal
SB	\$1,094,754,019	50.45%	49.3%	\$1,186,577,326	\$91,823,307
SDB	\$190,416,767	8.78%	8.2%	\$197,361,746	\$6,944,979
SWOB	\$214,204,585	9.87%	7.5%	\$180,513,792	-\$33,690,793
HUB	\$37,161,198	1.71%	2.2%	\$52,950,712	\$15,789,514
VOSB	\$127,329,204	5.87%	3.5%	\$84,239,770	-\$43,089,435
SDVO	\$62,243,865	2.87%	1.3%	\$31,289,057	-\$30,954,807
NAB	\$31,286,027	1.44%	N/A	PRC clause H.20 small business requirement ≥ 17% of total Contract Price performed by SB.	
Large	\$586,161,160	27.01%	N/A		
GOVT	\$2,179,603	0.10%	N/A		
GOVT CONT	\$482,866,522	22.25%	N/A		
EDUCATION	\$96,593	0.00%	N/A		
NONPROFIT_	\$3,430,919	0.16%	N/A	Total Contract (mod 375):	\$5,696,680,278
FOREIGN	\$295,845	0.01%	N/A	17% rqmt:	\$968,435,647
<b>Total</b>	<b>\$2,169,784,662</b>	<b>100.00%</b>	<b>N/A</b>	SB actual:	\$1,094,754,019
				<b>Bal to rqmt</b>	<b>-\$126,318,372</b>

### Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.1 billion in goods and services with over 50 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

December 2014  
CHPRC-2014-12, 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.

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
Glovebox/ Hood Removed or Dispositioned in Place	-	219 gloveboxes/hoods
KPP Rooms/Areas Ready for Demo	-	60 rooms/areas
Asbestos/ACM Removed	330	18,071 feet
Process Vacuum Piping Dispositioned	-	2,545 feet
Process Transfer Line Dispositioned	-	1,153 feet
Pencil Tank Units Removed (Shipped)	6	163 pencil tank units
Buildings Ready for Demo	-	40 structures
Buildings Demolished or Removed	-	40 structures
Non-radioactive Waste Shipped	14	57 m <sup>3</sup>
TRU/TRU-M Shipped	-	1,447 m <sup>3</sup>
LLW/MLLW Shipped	27 m <sup>3</sup>	6,041 m <sup>3</sup>

Removal of plutonium-contaminated process equipment continued, with a particular focus on removing gloveboxes, associated piping, and ductwork. The total gloveboxes removed to date is at 92 percent complete.

- Continued development of implementation plan for Revision 11 annual update of the Plutonium Finishing Plant (PFP) Deactivation and Decommissioning Documented Safety Analysis (DSA), and Revision 11 of the PFP Technical Safety Requirements (TSRs).
- Completed final equipment removal and cleanout of the 232A Scrubber Cell in 234-5Z RMA Line
- Completed size reduction and seal out of 236-Z Pencil Tanks 43/44, 50, and 121 (9 Units)
- Dispositioned 236-Z Pencil Tanks 10 and 21/22 (6 Units)
- Completed decon of Room 166 in 234-5Z Backside Rooms
- Removed two overflow lines and the vacuum transfer line from the HC-6
- Completed Repairs to the PRF Canyon Crane
- Removed 330 feet of Asbestos in the 234-5Z Duct Level
- Continued work on WT-2 and WT-3 gloveboxes in 242-Z

## EMS Objectives and Target Status

Objective #	Objective	Targets	Actions	Due Date	Status
15-EMS-PFP-OB1-T1	Reduce/eliminate potential contaminated effluents (air and liquid) from PFP complex	1. Remove material at risk to reduce potential air emissions. 2. Reduce/eliminate contaminated liquid effluents.	1. Evaluate the percent reduction of potential emissions compared to the PTE in the RAWP archived due to removal of material at risk completed by the end of January 2015	02/16/15	0%
			2. Evaluate the percent reduction of potential emissions compared to the PTE in the RAWP archived due to removal of material at risk completed by the end of August 2015	09/15/15	
			3. Eliminate contaminated waste water streams and shut down 243-Z treatment facility (includes 296-Z-15 stack)	09/30/15	

## TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	3	
First Aid Cases	2	50	<ul style="list-style-type: none"> <li>12/3/14 – Employee tripped on a rock and fell on his left side. The area was level, but covered with rocks/gravel. Employee was taken to HPMC where he was examined and diagnosed as having a contusion on his left elbow. No treatment was given and he was released to work without restrictions (23528).</li> <li>12/3/14 – Employee felt sharp pain in finger while putting together a PAPR. Employee was taken to HPMC where he was examined and treated for a sliver. He returned to work with no restriction (23529).</li> </ul>
Near Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

### 11.02 Maintain Safe & Compliant PFP

- Continued development of implementation plan for Revision 11 annual update of the Plutonium Finishing Plant (PFP) Deactivation and Decommissioning Documented Safety Analysis (DSA), and Revision 11 of the PFP Technical Safety Requirements (TSRs).

### 11.05 Disposition PFP Facility

#### 242-Z

- Completed Mechanical isolation of WT-3 Glovebox
- Completed removal of tanks and internal piping of WT-3 Glovebox
- Continued size reduction and waste load out of WT-3 Glovebox
- Initiated mechanical isolation and internal size reduction of WT-2 Glovebox
- Completed NDA shots on WT-2 Glovebox
- Began size reduction and waste load out of WT-2 Glovebox
- Sampled material in WT-1 Glovebox
- Completed inspection of Mezzanine tanks

#### 234-5Z

- RMA Line
  - Completed equipment removal and final cleanout of the 232A Scrubber Cell.
- Backside Rooms
  - Completed decontamination of Room 166
  - Removed two overflow lines and the vacuum transfer line from the HC-6
- Duct Level
  - Adjusted scaffolding in 234-5Z duct level to support ongoing asbestos removal activities
  - Removed ~76 feet of E4 Ducting in 234-5Z duct level

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

- Pencil Tanks
  - Completed size reduction and seal out of 236-Z Pencil Tanks 43/44, 50, and 121 (9 Units)
  - Dispositioned 236-Z Pencil Tanks 10 and 21/22 (6 Units)

## MAJOR ISSUES

**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** –

The team is incorporating comments on the DSA/TSR from the independent peer reviewer in anticipation of submittal to RL on January 7, 2015. The project is currently in the process of resolving DOE-RL comments on the Hazard Analysis. Accomplishments include:

- Documented Safety Analysis complete, peer review in-process
- Control Selection Document complete, peer review in-process
- Technical Safety Requirements complete, peer review in-process

**Issue – Current Non Destructive Analysis (NDA) Equipment is not providing adequate information to assist in reducing the Material at Risk values at PFP**

**Corrective Action** – Three independent systems have been procured to assist in safeguards measurements. One is an Ortec System, which is a hand-held NDA measurement tool; the second and third are Canberra Germanium Counters that are currently being calibrated.

Once both systems have been calibrated and are approved by safeguards, a few of the applications these systems could be used for include:

- Ortec System – 242-Z Tank Room tanks, PRF Canyon floor and walls, 291-Z Plenum.
- Canberra Systems – Trenches, 242-Z Tank Room tanks, 291-Z Stack. A dedicated system could also be placed in the A-Labs area to deal specifically with 242-Z waste.
- Once the Ortec and Canberra systems are approved for safeguards measurements they could be utilized to assay waste at the point of generation versus funneling everything through RADTU.

**Status** –

- Ortec system - Writing and validation of the calibration and operating procedures is ongoing. Comments have been given to the independent NDA consultant for incorporation.
- The collimator has been delivered and calibration of the Ortec instrument has commenced.
- Canberra systems – Calibration has been completed and the systems will be deployed January 8, 2015.
- The first gloveboxes to be measured with new systems are HA-9A and HC-9B.

### RISK MANAGEMENT STATUS

Unassigned Risk  
Risk Passed  
New Risk  
Change

 Response Plan Effective  
 Response Plan Partially Effective  
 Response Plan Not Effective

 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- 079 – Extend Respiratory Protection Time & Operating Efficiencies  Risk Owner - John Carranco	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. Continuing to implement Breakthrough Initiative number 1, Tool Time actions, and have developed tracking tools to monitor employees' time backside on a daily/weekly basis. 242-Z and PRF Project are consistently being successful in two dives per day averaging three hours each. The ETC is reflecting this as these efficiencies and positive changes in remaining duration are being reflected in the Field Execution Schedules. <u>No change in the month of December.</u>
PFP-086: Alternate/Temporary System Capabilities Required Prior to Building Demolition  Risk Owner – Ed Jacobs	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. Support staff continues to evaluate segregation of 234-5Z. An estimate was received in the month of November, but did not include temporary electrical power cost. The temporary electrical estimate was complete in the month of December. Management is evaluating engineering options to minimize airflow demands and requirements. Determination of the need for a temporary system is ongoing and a final determination of the need will be made in the summer of 2015. The one month delay does not impact filed activities, and cost/schedule forecasts will be updated to reflect temporary system capability estimates.
PFP-091: Approval of DSA Revisions  Risk Owner – Tom Bratvold	A team of professionals has been assembled to develop the DSA revision to support open air demolition of a Hazard Category 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 Revision 12 of the DSA. Revision 11 has been approved by DOE and is on track for implementation by January 6, 2015. Peer reviews and an independent review have been completed and comments incorporated into the DSA/TSR. A review copy of the DSA/TSR and supporting documents will be forwarded to RL on January 8, 2015 for comment. Comments will be documented and resolved prior to formal submittal to RL for approval. It is expected that Revision 12 will be implemented late-June 2015, with no additional controls enforced.

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-011/WBS 011</b>				
<p>PFP-092: Increased Characterization</p> <p>Risk Owner – Ted Hopkins</p>	<p>Events at the facility may increase the need for characterization above what is planned for cost and schedule.</p>	●	↑	<p>Characterization results for 234-5Z Duct Level have shown that some ducting may remain in place with appropriate mitigation (e.g. isolation, fixative application, etc.). However, the data shows that a large amount of the pre-filter box duct will need to be removed prior to demolition. Current results provide valuable information that will alter our approach to ductwork characterization. Going forward the project will implement a more targeted approach by coupon sampling to determine duct removal to points in the system where coupons may begin to show lower activity, which would indicate no further removal would be required. This differs from the previous approach of mapping the system to determine the amount of material-at-risk in duct segments to determine mitigation and waste disposition. The current approach to characterization will be to have field work teams collect coupon sample as work is being performed in their respective areas. This will ensure that real time information is received to allow the teams to effectively work on the area vs. system approach. Teams continue to perform characterization activities in the month of December.</p>
<p>PFP-074: Unexpected Configuration/Conditions</p> <p>Risk Owner – Chris Lucas</p>	<p>Unexpected facility configuration or site conditions are encountered during Cold &amp; Dark, or demolition activities.</p>	●	↑	<p>As a result of a realized risk in April, work packages which have similar demister pipe removal activities were immediately suspended pending investigation and incorporation of possible corrective actions. Mitigation actions were to perform hazard analysis of systems and document them in the work package. Stop work was lifted on June 17. Hazard analysis of systems and documentation of such in work packages was implemented upon release of the Stop Work and has proven to be effective in mitigating this issue. Risk will no longer be reported as threat values have reduced due to recovery actions associated with realization risk in April being implemented, and schedule/cost have been recovered. This risk will continue to be managed within the PFP project until risk closure criteria has been satisfied.</p>
<b>242-Z Risks</b>				
<p>PFP-242-06: More RH-TRU than Planned from 242-Z</p> <p>Risk Owner – John Carranco</p>	<p>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.</p>	●	↔	<p>242-Z Teams have been established and, working with PFP Waste Operations, have developed work packages which include packaging instructions on RH-TRU waste. It was reported that this risk be closed in November, but after additional discussion with the projects this risk will continue to be monitored until additional characterization is collected. No impacts during the month of December.</p> <p>Risk will no longer be reported on as this risk is not a “Key Project Risk”, and efforts to mitigated risk are continuous throughout subproject lifecycle. This risk will continue to be managed within the PFP project until risk closure criteria has been satisfied.</p>
<b>291-Z Risks</b>				
<p>PFP-291-01: 291-Z Characterization Unknowns</p> <p>Risk Owner – Ted Hopkins</p>	<p>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.</p>	●	↔	<p>Opportunities are being identified 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. No opportunities were identified in the month of December to characterize early.</p>

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-011/WBS 011</b>				
<b>Balance of Plant Decontamination/Decommissioning Risks</b>				
<p>PFP-BOP-01: More Extensive Cleanout/Decon Required</p> <p>Risk Owner – Ruben Trevino</p>	<p>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.).</p>			<p>Characterization efforts continue in the duct level following the sampling plan as developed by the Radiological Control and Environmental organizations at PFP. This effort will also be initiated in rooms/areas throughout the buildings to determine if structural items can remain in place as assumed or if decontamination or removal of structural items is needed prior to demolition. Characterization unit survey plans are being developed and will be added into work packages to support ongoing characterization throughout the ready for demolition phase of the PFP Closure Project. No change for the month of December, and will no longer be reported against as this is not a “Key Project Risk”, and efforts to mitigated risk are continuous throughout subproject lifecycle. This risk will continue to be managed within the PFP project until risk closure criteria has been satisfied.</p>
<p>PFP-BOP-02: Overall D4 Schedule Impacts From Interferences Between Sub-projects</p> <p>Risk Owner – Ruben Trevino</p>	<p>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&amp;D field teams to conduct Walk-downs and Work package development to improve interfaces within subprojects.</p>			<p>Additional field teams have been identified to initiate work in the duct level for the month of December. Previously identified teams continue to perform filter box removal, and HVAC duct removal efforts in the month of December. Changes have been implemented to the work package development process for the development of one work package to support efforts on all E4/E3 ducting, transfer lines, 26 inch process vacuum piping, filter bank removal, etc. This will allow additional field work teams to transition to the duct level work without initiating development of further work packages. Field work teams have been identified. As work is completed in RMA/RMC and Backside Rooms, field work teams will transition to work in the duct level.</p>
<b>PFP Demolition Risks</b>				
<p>PFP-DEMO-02: Air Modeling Increases Equipment Removal/Decontamination for Demo</p> <p>Risk Owner – Ted Hopkins</p>	<p>Work with the CHPRC environmental team 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.</p>			<p>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 continue when crews are in a given survey unit. As characterization unit survey plans are developed, they will be added to work packages. The Air Dispersion Model updates are on track to finish late December 2015 with opportunity to update sooner if characterization data is obtained.</p>
<p>PFP-DEMO-18: ORR Required for PFP D4</p> <p>Risk Owner – Tim Oten</p>	<p>The readiness activities scheduled in the baseline are appropriate for the risk and complexity of the PFP &amp; 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.</p>			<p>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). After implementation of Revision 12 of the DSA, the process of identifying ORR vs. RA will be evaluated and the need for the continuation of this risk will be assessed. No change from the month of December. This is not a “Key Project Risk” and will no longer be reporting against. This risk will continue to be managed within the PFP project until risk closure criteria has been satisfied.</p>

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-011/WBS 011</b>				
<b>PRF Cleanout/Decontamination Risks</b>				
PFP-PRF-01: PRF Canyon Cleanout Scope Increases  Risk Owner – Ed Jacobs	Characterization data will be collected as early as feasible to allow early identification of any issues associated with the planned approach.	●	↔	Dose rate survey results were mapped on September 25th to obtain accurate dose results (unmitigated) to plan manual entries and grouting requirements. Preliminary results indicate that dose is manageable inside the canyon, and planning assumptions have been updated to reflect this data. Data collected will also be factored in planning for entries to install grout conveyance system. Canyon floor grouting CSER is proceeding and scheduled completion date is March 31, 2015. Canyon clean-up is proceeding based on current plans to complete pencil tank size reduction, remove debris pile and loose debris on floor, perform floor grouting, then characterize walls and perform decontamination. The grouting evolution is expected to be initiated upon completion of Pencil Tank Size Reduction, late May 2015.
PFP-PRF-02: PRF Canyon Crane Reliability Issues Result in Cost/Schedule Growth  Risk Owner – Ed Jacobs	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.	●	↓	Canyon Crane bridge malfunctioned December 8th, resulting in negative cost and schedule impacts to troubleshoot, and repair crane in the month of December. After repairs were made functionality monitoring continued, and will continue as canyon crane is currently expected to continue to function for pencil tank size reduction (late May 2015). Engineering will continue to monitor functionality, and make a final decision if additional FY2015 maintenance is required, but project will continue preventative maintenance activities. If crane fails, manned entries will be made to determine event. If crane fix is not immediate, work force will be diverted to other high priority work until the canyon floor is grouted and pencil tank size reduction will be completed with manned entries.
PFP-PRF-21: OPP: 236-Z Floor/Pan Grouting  Risk Owner – Ed Jacobs	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.	●	↔	There are no issues at this time and this is work that will be performed in FY2015. In preparation, a grouting concept is being developed and a grout specification is being prepared. This activity will require a revised CSER calculation and DSA USQ evaluation and is currently being worked. The expected finish date for the CSER is March 31, 2015. Grouting proposals are due January 29, contract award is scheduled by March 2, mock-up is scheduled to start March 17, and field work initiates April 28. This is not a “Key Project Risk” and will no longer be reporting against. This risk will continue to be managed within the PFP project until risk closure criteria has been satisfied.
<b>RMA/RMC Glovebox Removal Risks</b>				
PFP-GB-02: Glove boxes Isolation/Internal Strip out takes longer than planned  Risk Owner – Rick Garcia	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.	●	↓	Field teams incorporated lessons learned from similar work that has previously been performed at PFP. This risk will continue to be reported until all gloveboxes are isolated: 236-Z - Lack of resources to staff crews is impacting schedule for completing Column Glovebox work until June 2015. Gallery Glovebox work is scheduled to complete in June 2015. MT Glovebox work completed in December 2014. Delays do not impact critical path activities. 242-Z – This risk will continue to be monitored throughout completion of 242-Z strip outs, late April 2015. This information is reflected in each respected EAC.

## 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	8.8	8.0	8.3	(0.9)	-9.6%	(0.3)	-3.7%

Numbers are rounded to the nearest \$0.1M

#### CM Schedule Variance: (-\$0.9M/-9.6%)

The current month unfavorable schedule variance is primarily the result of receiving large pieces of demolition equipment earlier than planned (November vs. December) and PRF canyon crane bridge malfunction resulting in unplanned repairs utilizing resources assigned to Pencil Tank work impacting the continuation of work on the PRF Pencil Tanks. Partially offset by working behind schedule work scope associated with glovebox removal in the 234-5Z Remote Mechanical C (RMC) Line and 242-Z Control Room, and performing scope associated with the inspection of the Mezzanine chemical tanks in 242-Z earlier than planned.

#### CM Cost Variance: (-\$0.3M/-3.7%)

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	755.7	724.9	762.0	(30.8)	-4.1%	(37.0)	-5.1%	937.6	967.0	(29.5)

Numbers are rounded to the nearest \$0.1M

#### CTD Schedule Variance (-\$30.8M/-4.1%)

The Schedule Variance is within reporting thresholds.

#### CTD Cost Variance (-\$37.0M/-5.1%)

The negative cost variance is primarily a result of prior year unrecoverable costs as well as FY2013 Sequestration impacts to D&D work scope and extending Level-of-Effort and support services, consistent with delayed activities, in support of completing Tri-Party Agreement Milestone M-083-00A. In addition, work scope was added to complete chemical mitigation efforts, unexpected repairs were made to the PRF canyon crane, unplanned costs to support implementation of efficiency initiatives at PFP (i.e., foaming and PremAire Breathing Air), and increased training as a result of assignment of new Health Physics Techs (as the result of HAMTC lamping process) to PFP have also contributed to this variance. Fewer breathing air suits and hoses are being used than originally planned for 242-Z entries as a result of fewer field work team members required to perform hands-on work in 242-Z because of the confined space and size of suits (three suits per day vs. five).

**Variance at Completion (-\$29.5M/-3.1%)**

The Variance at Completion is within reporting thresholds.

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

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

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2015		
	Projected Funding	Spending Forecast	Spend Variance
RL-0011	118.4	117.6	0.8

Numbers are rounded to the nearest \$0.1M

**Funds/Variance Analysis**

Projected Funding remained near \$118.4 million. The Spending Forecast increased slightly from the prior month and includes actions anticipated to achieve the funding targets.

**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 Tri-Party Agreement milestone – M-083-00A, *PFP Facility Transition and Selection Disposition Activities*.

**Baseline Change Requests**

BCRA-PRC-15-014R0, *HPIC Updates December 2014*

## MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-44A	Complete Transition of 234-5Z and ZA/243-Z/291-I & 291-Z Facilities	09/30/15		10/20/16	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		12/5/16	The PFP Project continues to make progress on the behind schedule critical path work scope being performed. However, this Tri-Party Agreement completion is at risk of meeting the September 30, 2016 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)

**December 2014**  
**CHPRC-2014-12, Rev. 0**  
**Contract DE-AC06-08RL14788**  
**Deliverable C.3.1.3.1 - 1**

## PROJECT SUMMARY

- The 100K Operations group continued maintaining facilities in a safe and compliant condition and continued supporting the Engineered Container Retrieval and Transport System (ECRTS) Project work by supporting Annex Construction Activities.
- *The Preliminary Documented Safety Analysis (PDSA) for the Sludge Treatment Project Engineered Container Retrieval and Transfer System (ECRTS) and the Sludge Treatment Project (STP) Safety Design Strategy Letter* continued to be reviewed by RL. Current project schedule estimates RL approval by mid-January.
- The ECRTS Project continues to process additional procurement packages and has them in the formal acquisition process. Progress continued with the six fabrication contracts that have been awarded to date.
- Continued testing activities at MASF and completed procurements for the ingress/egress transport cast and the first generation Hydrolance.
- MASF continued Operator training and familiarization with ECRTS components at MASF. Operators reviewed ECRTS Process and Instrumentation Drawings and flowcharts; and performed electrical lineup and valve lineup for ECRTS process equipment.
- STP Annex Construction initiated fabrication of fire-protection sprinkler piping and installation of interior stairs and luminaries in the high bay. Continued work on fire coating application, installation of electrical panels, and safety significant hanger/support systems.
- In-Basin construction fieldwork for installing electrical equipment is expected to begin in January.
- T-plant seismic/structural analysis – awarded consultant contracts for seismic analysts to review and provide responses to the DNFSB staff lines of inquiry dealing with the T-Plant seismic analysis.

## 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	14	<ul style="list-style-type: none"> <li>• Employee reported elbow pain due to activities from de-icing. Body part affected: Right elbow (23533)</li> <li>• Employee developed groin strain from lifting a generator. Body part affected: Groin (23535)</li> </ul>
Near-Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

- MASF completed fabrication of the ingress/egress transport cart. The cart will be used to maneuver the production ingress/egress assembly into place during construction installation. Also completed test runs with the first generation Hydrolance that confirmed acceptable performance.
- Annex Construction completed shop fabrication of stainless exhaust ductwork, the fire protection sprinkler piping, and the hydronic piping and completed the installation of the metal wall framing and gypsum wall board between the HEPA and Mechanical rooms in the Low Bay.
- Completed procurement for the additional spreader bar necessary to stabilize the top two sections of the Engineered Containers based on mock-up testing at MASF and is undergoing load testing.
- 100K Operations completed electric fire pump and diesel engine driven fire pump three-year flow testing, both pumps passed initial data review. The work package is with Engineering for final data review and pump curve analysis.

## MAJOR ISSUES

None currently identified.

## RISK MANAGEMENT STATUS

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

 Risk Response Effective  
 Risk Response Partially Effective  
 Risk Response Not Effective

 Increased Confidence  
 No Change  
 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  Risk Owner: Neal Sullivan	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 Revision 1 will be formally submitted to RL in September 2014.			A revision to the PDSA incorporating the results of supporting analyses and design changes developed to incorporate ECRTS process system nuclear safety initiatives implementation was submitted to RL for approval. RL indicated on January 8, 2015 that they plan to approve two of the three nuclear safety initiatives (Blending & Spray Leak Dose Consequence Reduction), but would not approve the third nuclear safety initiative (Passive Ventilation), as submitted. RL & CHPRC personnel met and negotiated an STSC headspace hydrogen mitigation strategy that is acceptable to both parties. This strategy will be specified as a Condition of Approval (COA) in the pending PDSA Safety Evaluation Report (SER). The SER is forecast to be approved prior to the end of January 2015.
STP-072: Delayed STSC/ECRTS Procurement & Delivery  Risk Owner: Neal Sullivan	Identify qualified vendors up-front, conduct fabricator on-site inspections, and ensure proactive involvement of engineering, QA, Project Controls, & Procurement personnel.			Risk mitigation strategy is effective – At this time, no forecasted delays. Continue to work closely with fabrication vendors (ABW Technologies Inc., Columbia Energy and Environmental Services, and HiLine Engineering and Fabrication Services). SSC fabrication risks have been effectively managed. Weekly interface meetings are held to ensure fabrication challenges are discussed and appropriately resolved.

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-0012/WBS 012</b>				
<b>STP-084: T-Plant Transition from Min-Safe Takes Longer than Planned</b>	Initial activities to support the Sludge Treatment Project at T-Plant should include performance of critical assessments/inspection of facility support systems such as fire, ventilation, crane, and electrical to determine condition. Existing spare parts are adequate to ready to support the STP project.	●	↔	The existing inventory of spare parts will be maintained at T-Plant or scavenged from other similar on-site cranes. During Initial startup/transition activities, the facility is doing an internal work site assessment after it re-staffs the facility, removes the tamper indicating tape from the canyon (i.e. allows canyon access) and complete the crane PM and all required life safety code inspections and testing. This will ensure the facility is ready to support the start of construction. This internal worksite assessment is in the project FES under ECRD190, 200, 210, 220, 230 and ECRD680. The expected finish date for T-Plant NLOP Work Site Assessment is January 2016.
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.	●	↔	Received direction from RL to proceed with accelerating FY2016 construction activities in the month of November. Statement of Work (SOW) and Contract modifications for planned work activities are complete, and field teams commenced work in the basin. Additional SOW is needed to complete FY2015 work scope and is tracked via the Field Execution Schedule (FES). Future Basin installation and testing in FY2017 contains the majority of consequences for this risk. SOW for the equipment installation is slated to go out for bid late FY2015, and tracked via the FES.
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.	●	↓	Areas of concern are lack of Albi Clad application schedule recovery actions by the painting subcontractor, and their performance is impacting the mechanical duct and piping installations and the electrical panel and luminaire installation. Procurement has issued the general contractor a letter requesting they provide recovery actions by 1/9/15.
STP-ANX-024: K-Annex Engineering During Construction Scope	Process Statement of Work (SOW) to provide additional support staff to aid in design reviews and take back the ownership of the Structural, Architectural and Electrical design.	●	↔	Completed SOWs to provide additional support staff to facilitate identification of issues and to provide a more timely resolution. The mechanical and fire protection systems responsibility will remain with the original Title III Engineer though the conclusion of the project.

## 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	5.2	4.2	4.4	(0.9)	-17.7%	-0.1	-3.3%

Numbers are rounded to the nearest \$0.1M

#### CM Schedule Performance (-\$0.9M/-17.7%)

The CM unfavorable variance is primarily due to BCWP being realized for work that was completed ahead of schedule in FY2014 as buyback work. Additionally, Annex Construction had some minor delays due to extended durations completing albi clad work which impacted mechanical and electrical installations.

#### CM Cost Performance (-\$0.1M/-3.3%)

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	453.2	457.9	470.6	4.7	1.0%	(12.7)	-2.8%	692.7	720.2	(27.5)

Numbers are rounded to the nearest \$0.1M

#### CTD Schedule Performance (+\$4.7M/+1.0%)

Variance is within reporting thresholds.

#### CTD Cost Performance (-\$12.7M/-2.8%)

Variance is within reporting thresholds.

#### Variance at Completion (-\$27.5M/-4.0%)

Variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

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

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY2015		
	Projected Funding	Spending Forecast	Spend Variance
RL-0012	81.7	79.8	1.9

Numbers are rounded to the nearest \$0.1M.

#### Funds/Variance Analysis

The FY2015 Spending Forecast of \$79.8 million reflects an increase of \$2.1 million from the prior month primarily due to an increase in the forecast for T Plant modifications and an increase in KW Ops for additional resources added to bring staffing up to adequate levels.

#### Critical Path Schedule

The critical path 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 include the filling of STSCs with sludge and transferring them to T Plant, completing Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin*.

#### Baseline Change Requests

BCR-012-15-001R0 - *STP Schedule Corrections.*

## MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-175	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)

December 2014  
CHPRC-2014-12, 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 – a total of 32K gallons (containing various waste water streams; e.g., Mixed Waste Burial Trench leachate, Ground Water perched water, and Tank Farms condensate). Waste Encapsulation and Storage Facility (WESF) Stabilization and Ventilation Project (W-130) issued an Integrated Project Team Charter and is continuing preparing the detailed design for the project. Central Waste Complex (CWC) performed high radiation area entry into 2402WL to establish current dose rates. Effluent Treatment Facilities (ETF) completed decontamination of Basin 44 crane and released it back to Mission Support Alliance (MSA). The project to construct a transfer line from the Environmental Restoration Disposal Facility (ERDF) Leachate to 200 West Pump-and-Treat Facility (200W P&T) continued preparation of Statement of Work for installation of the transfer.

## EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
15-EMS-DWFRS-OB1-T1	Reduce the risk of noncompliance with environmental requirements.	Develop compliance matrices for T Plant and CWC.	9/30/15	40%

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	5	33	<ul style="list-style-type: none"> <li>12/1/14 - Employee reported loading salt bags from a pallet into spreader and developed shoulder pain. Body part affected: Shoulder (23526)</li> <li>12/4/14 - Employee experienced irritation in the eye from probable concrete dust. Body part affected: Eye (23530)</li> <li>12/10/14 - Employee was walking on sidewalk when foot slipped off the edge. Body part affected: Ankle (23532)</li> <li>12/29/14 - Employee was descending stairs, missed last step, and fell to the ground. Body part affected: Hand (23537)</li> <li>12/29/14 - Employee cut finger on metal band of file folder. Body part affected: Finger (23538)</li> </ul>
Near Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

### 13.01 Project Management

- Continued Project Management support for high priority projects
- Continued support of CHPRC Legacy projects.
- Provided interface support to the “One System” organization at the Tank Operations Contractor on options/alternatives for Consolidated Waste Management Facility.

### 13.02 Capsule Storage & Disposition

- Performed/Completed:
  - 28 Preventive Maintenance (PM) work packages
  - Technical Safety Requirement (TSR) Surveillances
  - Radiological (Rad) surveillances
  - Operational surveillances
  - Replacement of pool cell #3 Beta monitor system; annual calibration and 30-Day functional test conducted and returned to service
  - One-year inspection of 225BG Closed Loop Control System
  - Quarterly Treated Effluent Disposal Facility (TEDF) environmental sampling
  - 30-day Functional Testing of Pool Cell Weight Factor Indicators and Transmitters
  - Quarterly calibration of Pool Cell Weight Factor Alarm Switches
  - 30-day calibration of Wet Surface Fluid Cooler chemical feed 1, 2 and 3
  - Quarterly Pool Cell water sampling
  - Six-month Personal Safety Device Inspection
  - Three-month vibration testing
  - Replacement of stripped bushing/leaking drain valve on 225BC-6400-42 after cooler. Raw water restored to 225BC
  - Validation of 15-ton canyon crane preventive maintenance procedures
- WESF Stabilization and Ventilation Project (W-130):
  - Issued Integrated Project Team Charter
  - Continuing detailed design
  - Developing core drilling and grouting sequencing to incorporate ALARA
  - Initiated public comment period of Class 3 Permit modifications and Closure Plan
  - Continued working through comments from Ecology on Treatability Variance for floor sweepings in Hot Cells B and C
  - Drafted Startup Notification Technical Description and Level of Review score sheet

### 13.03 Canister Storage Building (CSB)

- Completed:
  - Annual Multi-Canister Overpack MCO Handling Machine (MHM) lube/hoist brake system inspection/repair of MHM hydraulic unit bolts
  - Annual calibration and loop test of CSB-AH-004
  - Annual Beta Continuous Air Monitor (CAM) calibrations
  - Annual Interim Storage Area (ISA) surveillance of dry cask storage systems (DCSS) to determine condition of outer/inner containers and verify tamper indicator devices (TIDs) are intact
  - Annual/monthly 2701HV propane generator preventive maintenance
  - 180 day MCO sample hood flow indicator calibration
  - Quarterly Flow Controller FC-408, FC-409 mass flow functional test
  - Quarterly lock/tag surveillance
  - Quarterly operating area exhaust fan inspection
  - Monthly Radioactive Material Area (RMA) inspection

- o Monthly Continuous Air Monitor (CAM) function tests
- o Movement of MCOs in preparation for upcoming sampling activities
- o 2902HV fire system testing/inspections
- o Repairs to Fire Alarm Beam Detector #3
- o 38 Preventive Maintenance (PM) work packages
- Continued upgrade to Data Collection System (DCS). Operational Acceptance Testing (OAT) is currently in progress.

### 13.06 TRU Repackaging

- Shipped large fiberglass-reinforced plywood waste box (236Z1018A) in the Super 7A to PermaFix Northwest (PFNW)

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

- Performed/Completed:
  - o Annual glove box pressure differential indicator calibrations (TSR)
  - o Planned roof repairs for 2404WB
  - o Hanford Fire Department (HFD) completed 2336W fire water backflow preventer PM requiring Limiting Conditions for Operation (LCO) entry. Work was completed with the use of New Management Directive PRC-MD-OP-52934
- Surveillances/PMs:
  - o 14 TSR surveillances
  - o 15 PM packages
  - o 58 Rad surveillances
  - o 27 Operational surveillances

### 13.08 T Plant

- Performed/Completed:
  - o Annual Treated Effluent Disposal Facility (TEDF) sampling
  - o Fire barrier repairs in 2706TA
- Surveillances/PMs
  - o Eight TSR surveillances
  - o 192 Rad surveillances
  - o 22 PM packages
  - o 116 Operational surveillances

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

- Performed/Completed:
  - o High radiation area entry into 2402WL to establish current dose rates
  - o Support for Hanford Fire Department procedure validation in CWC buildings in preparation for scheduled testing and inspections
  - o LLBG annual fire surveillance assessment with Fire Protection Engineer (TSR)
  - o Off-loaded the empty IP-1 metal box from trailer to the ground next to the 231ZDR-11 waste box using the 518 crane in the Outside Storage Area A in preparation for overpacking box in a shippable configuration.
- Surveillances/PMs:
  - o Six TSR surveillances
  - o 28 PM packages
  - o 143 Rad surveillances
  - o 129 Operational surveillances

- Shipments Received:
  - Four boxes to MWT
  - One SWB to CWC from PFNW

### **13.11 Liquid Effluent Facilities (LEF)**

#### **Effluent Treatment Facilities (ETF)**

- During transfer of leachate from the Environmental Restoration Disposal Facility (ERDF) to Liquid Effluent Retention Facility (LERF), three valve pits (pits# 23, 26 and 32) were identified as having leaking Air Vacuum Relief Valves (AVRV) above normal operating conditions. Calculations of transferred leachate resulted in a greater than allowable leak rate of 5% (5.19%), resulting in Washington Closure Hanford (WCH) notification to U.S. Environmental Protection Agency (EPA). Repairs to the valves were made to support the leachate transfer.
- Continued support to Washington River Protection Solutions (WRPS) and its subcontractor to develop a plan to transition ETF to WRPS
- Completed:
  - Basin 44 crane decontamination and released it back to Mission Support Alliance (MSA)
  - Informational meeting with WRPS senior management, ETF management and staff on transition of ETF
  - LERF Basin 4th Quarter Air Operating Permit Inspection
  - Weekly cold weather protection checklists
  - Weekly check of spill response cabinets
  - Monthly Fire System and Extinguisher Inspections
  - Annual inspection of Permanently Installed Lockout Devices
  - Collection of Treated Effluent Disposal Facility disposal samples and verification berm sample for delivery to offsite laboratory for analysis
  - Decontamination, cleaning, and reinstallation of contamination control catch containers in the Process Area
  - Shift inspections of the 200 West Pump-and-Treat Facility; no issues observed
  - Inspection of Sump-1 and Secondary Waste Receiving Train-A (SWRT)
  - Post Job review for Cleaning/Visual Inspection of SWRT-A
  - Weekly Treated Effluent Disposal Facility (TEDF) pH and conductivity calibrations
  - Monthly Ground-Fault Circuit Interrupter testing
  - Troubleshooting and adjustment of Radiological Controlled Area (RCA) exhaust fan B breaker
  - Quarterly and semi-annual RCA exhaust fan inspections
  - Monthly Emergency Light Inspection/Testing
  - Semi-Annual Cooling Tower Inspection
  - Quarterly lab hood flow testing
  - Annual exhaust fan blade pitch calibrations
  - Refrigeration Equipment Services performed Preventive Maintenance on Pump Station #1 Heating, Ventilation and Air Conditioning (HVAC)
  - Hanford Fire Department tested and inspected Wet Riser #1 at 2025EA
  - Pipefitters replaced three pressure gauges on encasement air manifold
  - Monthly Electric Lifts Battery Inspection
  - Re-lamping at the LERF garage

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

- Definitive design (90 percent) comments being reviewed and resolved
- Completed final draft of Statement of Work for installation of the transfer line

**Effluent Treatment Facilities (ETF)**

- Shipped:
  - One roll-on/roll-off (RO/RO) to ERDF
  - One Mixed Low Level Waste drum
  - Five containers to Centralized Consolidation/Recycling Center
- Received 7 tankers:
  - 32K gallons (74K fiscal year [FY])
- Treated effluent to State-Approved Land Disposal Site:
  - 0.0 million gallons (0.0 million FY)
- Discharged to 200A TEDF:
  - 1.6 million gallons (77 million FY)
- Received ERDF Leachate
  - 63K gallons (342K 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:
  - 12 Rad surveillances
  - 107 Operational surveillances
- Shipments:
  - Received one shipment totaling four waste packages of processed/treated waste from PFNW

## MAJOR ISSUES

**Issue:** Deteriorating Waste Containers - Retrieved and repackaged containers in storage are showing increased degradation requiring additional mitigation activities

**Corrective Action:** Significant risk remains. TRU Disposition activities would prepare the contents of these containers in a configuration suitable for eventual disposal at the Waste Isolation Pilot Plant (WIPP). This configuration would also mitigate/eliminate the risk and additional cost for long-term management of these containers.

**Status:** Continuing to use the best demonstrated available technology to provide adequate configuration and minimize the potential for contamination spread during the long-term storage (i.e., protecting boxes with tarps or protective shoring and overpacking drums). Provided letter to RL identifying risk and requesting path forward. RL has authorized some shipments and additional repackaging is included in the Integrated Priority/Buy Back Lists. RL has authorized one FY2015 shipment within available funding. Awaiting RL decision on priorities and available funding for the balance of FY2015.

**Issue:** CWC lighting failures – CWC complex buildings older lighting systems are failing and cannot be replaced on with like components.

**Corrective Action:** Compensatory measures are in place (e.g., employees carrying flashlights). A ROM estimate has been developed for system replacement.

**Status:** Replacement costs included in current Integrated Priority List to be presented to DOE-RL in January and investigating potential contract change.

### RISK MANAGEMENT STATUS

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

Risk Response Effective Increased Confidence  
 Risk Response Partially Effective No Change  
 Risk Response Not Effective Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-0013</b>				
<b>PRC-010: Requirements Change</b> Risk Owner: TBD	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 (CWC).
WSD-019: Commercial Capability Risk Owner: Dean Nester	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. DOT exemptions to transport to/from off-site contractor are complete through the end of Fiscal Year. There is still a risk associated with a federal driver which has been supplied by the BPA, but is no longer available. The DOE-RL driver obtained their qualifications on November 24, 2014, and performed their first Super-7A road-closure shipment from CWC to PFNW on December 18, 2014. Additionally, DOE-RL is working with BPA to secure access to another Federal driver in the case where we need to have two conveyances, thus requiring two drivers. Additional shipments are identified in "Buy Back/Integrated Priority List" list and a decision regarding FY2015 additional authorizations is expected in the next two months. CHPRC continues to be in the state of readiness to ship additional TRU waste packages to PFNW during FY2015 if funding becomes available.
WSD-086: W&FM Industrial Accident or Contamination Risk Owner: Ed McCarthy	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.			Updated permit requirements include quarterly removal of soil and vegetation and complete inspection of the covers. The costs for these requirements have been incorporated in the ETC and the first quarter inspections were completed in the month of December.
WSD-125: Three-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues Risk Owner: Darren Boone	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.			All priority 1 drums in CWC have been overpacked, there are approximately 19 priority 2 drums to overpack; however, this is not a static list and can increase based on current conditions. The additional requirements referenced for 231-ZDR-11 refer to the requirement to overpack in a shippable configuration. In the month of December all priority 1 watch list have been overpacked and the project received the metal box required to overpack 231-ZDR-11. Completion of the overpack is planned to complete in January 2015. Project will commence with priority 2 drums with lower priority in the coming months.

<p>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&amp;F Facility</p> <p>Risk Owner: Connie Simiele</p>	<p>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.</p>			<ul style="list-style-type: none"> <li>Heat Exchanger procurement continuing, and expected delivery date is May 2015; weekly status meetings indicate vendor is on time. Installation to perform by WRPS after transition from CHPRC to WRPS.</li> <li>LERF Cover Repairs made to basins 42 and 43; Repair strategy for Basin 44 endorsed by CHPRC management and RL; DOH to be briefed this month. Repairs to be made after Basin is emptied in late 2015/early 2016.</li> <li>Automatic Transfer Switch (ATS) #1 failure at WESF. Work package development, to allow troubleshooting activities, continues and is expected to be finished in January.</li> </ul> <p>Risk Response Plan partially effective – Continuing to experience Corrective Maintenance at higher rate than planned.</p>
<p>WSD-133: Results of External Audits/Assessments Impact Operations</p> <p>Risk Owner: Connie Simiele</p>	<p>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.</p>			<p>The gap analysis has been completed for two of the CWC compliance metrics for the Ecology Agreed Order. Requirements exceed planned work scope in relation to box 231-ZDR-11. (See Risk WSD-125)</p>
<p>WSD-W130-01: WESF Ventilation Upgrade Regulatory Strategy</p> <p>Risk Owner: Marie Gillespie</p>	<p>Work with regulators early on to develop a permitting plan that is approved by Ecology and the DOE.</p>			<p>Permitting has been revised to incorporate the preparation of a LDR Treatability Variance. A permitting strategy has been prepared and was finalized in December. This agreement was reached with the regulators to allow public comment period for the Revised Part A Permit application and the revised Closure Plant to proceed prior to Ecology receiving a certified LDR treatability variance.</p>
<p>WSD-W135-01: Cs/Sr Capsule Extended Storage Acquisition Planning Document Approval</p> <p>Risk Owner: Roger McCormack</p>	<p>Teaming with DOE is incorporated into the baseline to identify and incorporate new requirements. However, if additional requirements are identified, the additional scope to add to planning and subsequent flow-down is not included within the work planning.</p>			<p>The project schedule is based on receiving RL direction to proceed in October. The project is currently on hold and is not funded in the initial FY2015 funding profile, but has been added to the Integrated Priority/Buy Back list. The baseline has been adjusted to defer planning until April, which, if funded, will still significantly impact the ability to issue an RFP and award a contract in FY2015, which in turn, will delay completion of the project by a full year.</p>

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	7.6	8.4	6.0	0.8	10.0%	2.3	28.0%
Numbers are rounded to the nearest \$0.1M							

#### CM Schedule Performance (+\$0.8M/+10.0%)

The current month favorable schedule variance is due to an inadvertent error that understated performance on a Large Box shipment that was returned from Perma-Fix Northwest in November. This error was corrected in December.

#### CM Cost Performance (+\$2.3M/+28.0%)

The current period cost variance is due to documenting performance for November shipment from Perma-Fix Northwest this month, without the actual costs (received in the prior month) and the continued 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	900.3	902.2	863.0	1.9	0.2%	39.2	4.3%	1,352.7	1,263.7	89.1

Numbers are rounded to the nearest \$0.1M

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

The schedule variance is within threshold.

### CTD Cost Performance (+\$39.2M/+4.3%)

The cost variance is within threshold.

### Variance at Completion (+\$89.1M/+6.6%)

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

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

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

WBS 013/RL-0013 Waste and Fuels Management Project	FY2015		
	Projected Funding	Spending Forecast	Spend Variance
RL-0013	86.6	80.9	5.6

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis

Projected Funding is unchanged from the prior month. The FY2015 Spending Forecast changed from \$83.9 million to \$80.9 million due to the impacts of delayed staffing pending coordination across all CHPRC projects and the anticipated delay in ramp up of T Plant to a Base Operations configuration and resulting inability to perform cell clean out in FY2015.

### Critical Path Schedule

Critical path analysis can be provided upon request.

### Baseline Change Requests

BCR-013-15-002R0 - *FY2015 Shipment/Repackaging of Large TRU Waste Box from CWC*

BCR-013-15-003R0 - *Cs/Sr Dry Storage Planning Package Adjustment*

BCR-013-15-004R0 - *T Plant Ramp Up and Base Operations*

BCR-PRC-15-015R0 - *Undistributed Budget Adjustments December 2014*

BCRA-PRC-15-014R0 - *HPIC Updates December 2014*

## 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.

## 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)



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

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

December 2014  
CHPRC-2014-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

Pump-and-Treat (P&T) Operations continued making progress on the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)* remedial process documentation for the River Corridor and Central Plateau. Groundwater treatment and well drilling completed in December 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	27.0	82.8	7.8	29.2	-	-	-	-	-	-
HX P&T	24.6	67.5	2.1	6.1	-	-	-	-	-	-
KR-4 P&T	14.6	39.1	0.4	1.4	-	-	-	-	-	-
KW P&T	14.6	42.5	3.1	8.7	-	-	-	-	-	-
KX P&T	33.3	89.0	2.7	7.4	-	-	-	-	-	-
200 West P&T	80.9	239.2	6.2	18.9	249	737	5,479	16,243	.12x10 <sup>12</sup>	.35x10 <sup>12</sup>
<b>Combined</b>	<b>195.0</b>	<b>560.1</b>	<b>22.3</b>	<b>71.7</b>	<b>249</b>	<b>737</b>	<b>5,479</b>	<b>16,243</b>	<b>.12x10<sup>12</sup></b>	<b>.35x10<sup>12</sup></b>

Well Drilling by Area	FY2015 Planned	December	FY2015 Cumulative
100-KR-4	5	-	1
100-HR-3	12	-	-
NRDWL/SWL	4	-	-
200-UP-1	5	-	-
200-ZP-1	7	-	1
M-24	19	-	4
300-FF-5	34	-	-
DVZ URG TT	6	-	-
<b>Total Wells</b>	<b>92</b>	<b>0</b>	<b>6</b>

## EMS Objectives and Target Status

Objective	Target	Actions	Due Date	Status	Overall Target Status
15-EMS-SGWR-OB1 Reduce toxic air emissions at the 200 West P&T Facility	T1 – Implement one measure to reduce toxic air emissions (namely carbon tetrachloride) at the 200 West P&T Facility	Apply heat tracing and insulation to reduce condensation in the GAC containers during the colder months.	12/31/14	100%	50%
		Evaluate carbon tetrachloride emissions by compiling an annual emissions summary for FY2015.	9/30/15	0%	
15-SGWR-EMS-OB2 More effective promotion of EMS	T1 – Promote and increase S&GRP project personnel EMS awareness via various means throughout FY2015.	Present at least five EMS topics to S&GRP personnel on a minimum of five different occasions.	9/30/15	0%	0%
		Provide a discussion of at least five different EMS topics to be communicated to S&GRP personnel through the “S&GRP Daily Communications.”	9/30/15	0%	
	T2 – Promote and increase S&GRP drilling subcontractor personnel EMS awareness via direct communication (i.e., during subcontractor/SGRP meetings).	Discuss EMS topics with drilling subcontractor personnel, on a minimum of five different occasions with different topics at each session.	9/30/15	0%	0%
14-SGWR-EMS-OB3 Increased awareness of Universal Waste requirements	T1 – Promote and increase S&GRP project personnel awareness of Universal Waste requirements via direct communication with S&GRP personnel throughout FY2015.	On a quarterly basis provide focused universal waste training sessions.	9/30/15	25%	30%
		Conduct at least two walk downs of S&GRP universal waste collection areas to review compliance.	9/30/15	50%	

## 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	0	25	N/A
Near- Misses	0	1	N/A

## KEY ACCOMPLISHMENTS

### RL-0030.O1 RL 30 Operations

#### River Corridor

##### 100-F/IU Operable Unit

- Delivered the Decisional Draft Remedial Design Report/Remedial Action Work Plan (RDR/RAWP) to RL for review on December 9, 2014.

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

- Addressed the RL SAP Panel comments on the 100-KR-4 Data Quality Objective/Sampling and Analysis Plan (DQO/SAP).
- Addressed RL's comments on the Decisional Draft 100-KR-4 Interim RD/RAWP and the Operation and Maintenance Plan.

##### 100-NR-2 Operable Unit

- Progressed the Draft A RI/FS report comment disposition process to the feasibility study with the initial review of the "hot spots" technical position paper. There are 240 RI/FS closed comments from a total of 361 comments. This includes closing 223 comments on the Remedial Investigation from a total of 252 RI only comments. There are a total of 252 RI comments and 109 FS comments with an overall document completion of 66% closed comments.
- Conducted the third RL SAP Panel review for the 100-NR-2 Apatite Barrier and Long-term Performance Monitoring DQO/SAP on December 15, 2014.
- Restarted the bio-venting system on November 25, 2014. The semi-annual respirometer test began on December 15, 2014 and is planned to run through the week of January 26, 2015.

##### 300-FF-5 Operable Unit

- Obtained RL's signature on the Rev 0 RDR/RAWP on December 17, 2014; submitted to EPA for signature on December 17, 2014.
- Commenced the 300 Area post-ROD field investigation on December 30, 2014.
- Conducted the RL SAP Panel review for the 300 Area DQO/SAP with RL and EPA on December 1, 2014.

**Central Plateau****200-SW-2 Operable Unit**

- Delivered the Decisional Draft B RI/FS work plan to RL for review on December 22, 2014.

**200-WA-1 Operable Unit**

- Delivered the Decisional Draft Rev 0 RI/FS work plan to RL for review on December 31, 2014.

**200-IS-1 Operable Unit**

- Conducted field visit to 200-W-176-PL, 200-W-177-PL, 200-W-129-PL, and 200-W-143-PL sites with RL on December 8, 2014.

**200-BP-5 Operable Unit**

- Submitted the Draft A Rev 2 Treatability Test Plan for the 200-BP-5 Groundwater Operable Unit, to RL on December 17, 2014, for a final check prior to transmittal to the regulators.

**200-UP-1 Operable Unit**

- Finalized the 90% design package on modifications to the 200W P&T facility to add uranium treatment capacity.
- Issued the Functional Requirements Document for Iodine129 Injection Well Transfer Line from the 200 West Pump and Treat Facility.
- Submitted the Decisional Draft Rev 1 Sampling and Analysis Plan for Remediation Wells in the 200-UP-1 Operable Unit to RL for review on December 18, 2014.

**200-CW-5 and 200-PW-1/3/6 Operable Units**

- Provided a demonstration of the 3-D model of the 200-CW-5 and 200-PW-1/3/6 Operable Units to RL.

**200 West P&T**

- Average pumping rate for December was approximately 1,786 gpm.
- Effluent concentrations remain below cleanup levels specified in ROD.

**100 Area P&Ts**

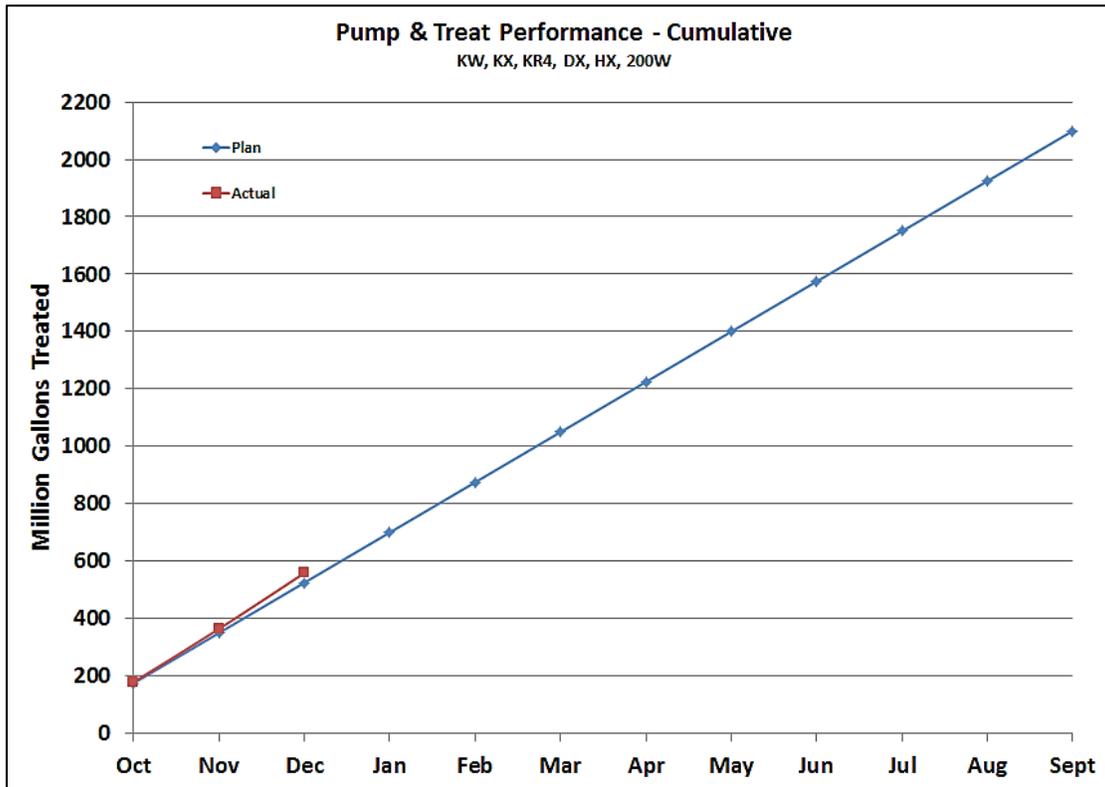
- Completed three separate, 30 day consecutive day periods with an average capacity of 300 gpm at the KW P&T. This exceeds original design capacity of 200 gpm
- Completed two separate, 30 day consecutive day periods with an average capacity of 700 gpm at the KX P&T. This exceeds the original facility design capacity of 600 gpm.
- Completed one, 30 day consecutive day period with an average capacity of 330 gpm at the KR-4 P&T. This exceed original design capacity of 300 gpm
- Completed rerouting of caustic addition point at DX facility to eliminate pipe fouling due to carbonate precipitation.
- Completed HX facility communications upgrade improving remote access reliability
- Continued extraction at WE11, high Chrome well, concentrations have dropped from 1000+ppb to less than 200ppb

**200-DV-1 Operable Unit**

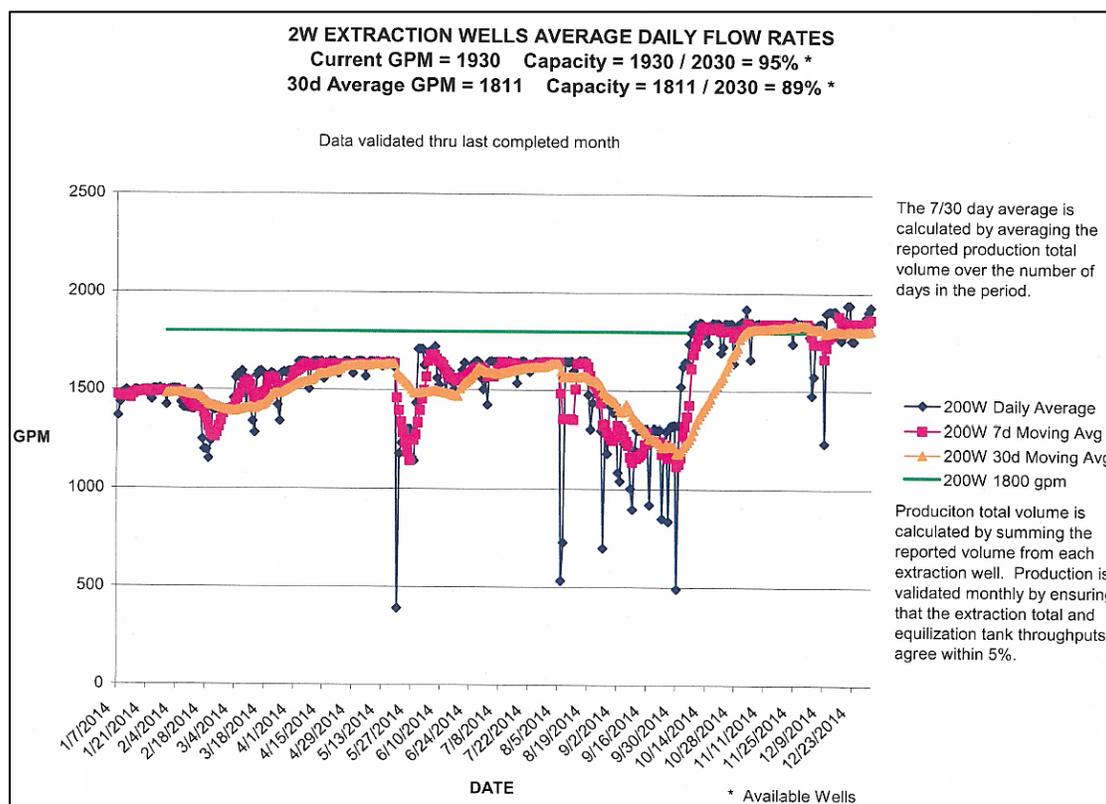
- The B Area perched water extraction system removed 3,424 gallons in December to bring the total volume of perched water removed to 249,727 gallons since initiating operations on August 30, 2011. The following quantities of contaminants were removed for the month of December:

Contaminant	December	Cumulative (since startup)
Tc-99	0.21 E-04 Ci	30.86 E-03 Ci
Uranium	0.4 kg	52.94 kg
Nitrates	4.3 kg	495.1 kg

**FY2015 P&T Operations**



## 200 West P&amp;T



## MAJOR ISSUES

**Issue** – The 100-NR-2 field work will be delayed due to the Section 106 Cultural Resource Review (CRR) and approval process associated with the Traditional Cultural Property (TCP). This issue impacted performance of the 100-NR-2 apatite barrier in FY2014, and now is causing an impact to the FY2015 scope associated with D&D of the inactive P&T facility and well drilling.

**Corrective Action** – Develop and implement an approach for preparing the CRRs and associated Memorandum of Agreements (MOAs) to perform field work within a TCP.

**Status** – Issue was previously identified in the risk register. This issue was elevated in December due to the potential to impact 100-NR-2 field work. Meetings will be held with RL and the Tribes in January 2015 to determine the path forward for preparing the CRR/MOA.

## RISK MANAGEMENT STATUS

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

 Risk Response Effective  Increased Confidence  
 Risk Response Partially Effective  No Change  
 Risk Response Not Effective  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>Progress on the 100-D/H PP has been delayed due to the requirement to include EPA's Remedy Review Board (RRB), which has been scheduled for January 26-30, 2015. The PP is then scheduled to be reviewed sequentially by Ecology's legal followed by EPA's legal. These sequential reviews will impact the schedule by eight months to a year. <i>No change from previous month.</i></p> <p>Largely due to the weekly comment resolution meetings with Ecology, the Draft A 100-N RI/FS Report has progressed through the RI and is <i>now working through the FS (Chapter 8)</i>. The first of four technical position papers that were submitted to Ecology in March 2014 to resolve significant comments on the FS is now being reviewed (<i>Hot Spots</i>).</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, RL, 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. The bi-weekly meetings that began in September are resulting in better coordination between the two companies. Early identification of FY2015 work scope has also allowed the cultural review process to begin early in the FY, which is resulting in earlier cultural approvals.</p> <p>No progress was made by RL on resolution of the Section 6 "Cultural Resources Review (CRR)" and associated Memorandum of Agreement (MOA) for installation of the 100-NR-2 apatite barrier. As a result, this work scope will not be performed in FY2015. The CRR process has also impacted the schedule for D&amp;D of the inactive pump-and-treat system due to the unresolved approach for the MOA. Meetings are planned to be held with RL in January to determine the path forward for cultural reviews at 100-N.</p>
<p><b>OPPORTUNITY:</b></p> <p><b>SGW-007A: Sampling Requirement Reduction</b></p> <p><b>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).</p> <p>Analytical and laboratory characterization can be achieved by working with regulatory agencies to minimize the analysis required, determining a standardized analyses run, and working with the laboratories to streamline data validation processes.</p>			<p>The <i>Optimization Plan to Revise the Groundwater Sampling Plan</i> is final and provides the roadmap to revise all groundwater SAPs over the next two years. A schedule was developed for completing RL's Panel Review on the SAPs planned to be revised in FY2015. This approach and schedule was provided to the agencies during the November 13, 2014 Unit Manager's Meeting.</p> <p>Two Operable Units (100-NR-2 and 300-FF-5) conducted RL SAP Panel Reviews in December.</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>Several new injection wells were hooked up at the end of September and have now increased pumping rates to 1,800 gpm. Four additional injection and two additional extraction wells are being drilled, completed, and hooked-up to the 200 West P&amp;T in late FY2015 to boost pumping rates to 2,000 gpm. Larger micronutrient pumps will be needed for flows above 1950 gpm (pumps are being ordered). Additional carbon is in the process of being ordered and will need to be loaded for flows above 2000 gpm.</p>

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
<b>RL-030/WBS 030</b>				
SGW-135: Major Equipment Failure at a Pump & Treat	For the P&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>Pump and treat is operating as designed. The 200 West P&amp;T is continuing to experience higher than planned maintenance costs due to issues with blowers, foaming, and well maintenance to prevent injection well fouling. Mitigation is ongoing as design changes are implemented to improve plant reliability and reduce labor costs.</p> <p>Mitigation examples include solving communication interruptions to wells with use of fiber optic cables, installation of heat trace on GAC containers, and eliminations of single point failures (injection header additions). <i>No change from previous month.</i></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	4.3	9.6	8.6	5.3	122%	1.1	11%

Numbers are rounded to the nearest \$0.1M.

#### CM Schedule Performance (+\$5.3M/122%)

The positive schedule variance resulted from the following:

- The well and aquifer sampling schedule is level loaded across the fiscal year. December was planned as 22% of the whole year while the project performed 27% of the sample collection and analysis due to the specific requirements to sample during low water.
- Implemented direction from RL to re-plan the 100-NR-2 apatite barrier expansion and jet injection activities to restart planning and mobilization in FY2016 and initiate fieldwork in FY2017.
- Tarping station installation, GAC sample collection, and ZP-1 air monitoring, O&M, and performance monitoring plan reporting was completed ahead of schedule. This positive variance was also supported by a strong start on the well hook-up activities to include material purchase, installation of road crossings, and HDPE pipe bonding activities.
- 100-KR-4 drilling has encountered difficult conditions, due to size of boulders and cobbles which has required re-drilling with larger diameter casings. 200-UP-1 drilling is also encountering delays due to a broken drill bit and thus requiring removal of all the drilled casing, backfilling and repair of the drill bit, then having to re-drill the borehole. Positive SV earned on accelerated 200-ZP-1 drilling in FY2014 is returning to zero.

#### CM Cost Performance (+\$1.1M/+11%)

The positive schedule variance is due to sample analysis no longer being performed at WSCF, the overall lower cost of analyses being performed at off-site labs resulted in a positive cost variance.

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

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	1,040.7	1,041.1	1,026.6	0.4	0.0%	14.5	1.4%	1,523.7	1,471.7	52.0

Numbers are rounded to the nearest \$0.1M.

### CTD Schedule Performance (+\$0.4M/0.0%)

Variance is within reporting thresholds.

### CTD Cost Performance (+\$14.5M/+1.4%)

Variance is within reporting thresholds.

### Estimate at Completion (EAC)

Variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

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

RL-0030 Soil and Groundwater Remediation	FY2015		
	Projected Funding	Spending Forecast	Spend Variance
RL-0030	137.8	136.9	1.0

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis

FY2015 initial budget guidance received from RL reflects expected funding of \$445.1M for the company. RL-0030 project funding is \$137.8 million for FY2015. The FY2015 Spending Forecast of \$136.9 million is essentially unchanged from the prior month, which incorporated actions to achieve the funding targets.

### Critical Path Schedule

Critical path analysis can be provided upon request.

### Baseline Change Requests

BCR-030-15-007R0 - *Re-Plan of 100-NR-2 Apatite Barrier Expansion and Jet Injection Activities*  
 BCR-030-15-008R0 - *CO #261, Design and Construction of Unloading Station and Transfer Tank*  
 BCR-030-15-009R0 - *CO #262, 200W P&T System – Membrane Bioreactor Additions*  
 BCR-030-15-010R0 - *CO #264, 200-UP-1Uranium Treatment Inside 200W P&T Facility*

**FY2015 Management Reserve (Funded): \$1.75M**

No FY2015 Management Reserve was used during December. \$832K remains in FY2015 Management Reserve.

## MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) 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-091-40L-044	PMM Submittal Jul-Sep 4th Qtr. FY2014 Burial Ground Sample Results	TPA	12/15/14	12/3/14		Complete
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		9/29/15	Dispute resolution was extended to January 30, 2015. Negotiations are underway to confirm scope and revise the milestone due date.
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-015-113	Submit Draft B, 200-SW-2 Radioactive Landfills Group RFI/CMS/RI/FS Work Plan to Ecology	TPA	3/31/15		3/29/15	On schedule
M-015-110A	Submit RFI/CMS & RI/FS Work Plan for 200-DV-1 OU to Ecology	TPA	3/31/15		1/23/15	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		9/30/16	To be missed. The FS Report and PP are funded in FY2015, but were not funded in FY2014.
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	TPA	6/30/15		5/13/20	To be missed. The work plan was not funded in FY2014 or in FY2015.
M-024-66-T01	Conclude Discussions of Well Commitments	TPA	8/1/15		8/1/15	On schedule
M-091-40L-047	PMM submittal Apr-June 3rd Qtr. FY2015 Burial Ground Sample Results	TPA	9/15/15		9/15/15	On schedule

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comment
M-015-110B	Submit CMS & FS & PP/Proposed CA Decision for 200-DV-1 OU to Ecology	TPA	9/30/15		6/24/19	To be missed. The 200-DV-1 work plan (M-015-110A) has not been submitted to the regulators.
M-016-125	Submit a RD/RA WP for 200-CW-5 and 200-PW-1/3/6 to EPA	TPA	9/30/15		9/21/15	On schedule
M-016-190	Complete installation of extraction and injection wells for U Plant area P&T for uranium and tech-99, and Iodine-129 hydraulic containment system	TPA	9/30/15		9/09/15	On schedule
M-085-02	Submit a change package to establish a schedule for submittal of the RI/FS Work Plans for the 200-CB-1, 200-CP-1, and 200-CR-1 Operable Units and a schedule for submittal of the Removal Action Work Plans for 224B and 224T Plutonium Concentration Facilities	TPA	9/30/15		9/30/15	On schedule
M-015-38B	Submit Revised FS Report and PP for CW-1, CW-3, & OA-1 to EPA	TPA	10/30/15		10/30/15	On schedule. The milestone was changed to require a schedule for completing the Revised FS Report and PP for CW-1, CW-3, & OA-1 to EPA
M-091-40L-048	Submit July to Sept. 4th Quarter FY-15 Burial Ground Sample Results.	TPA	12/15/15		12/15/15	On schedule
M-015-91B	Submit FS Report and PP for 200-WA-1 to EPA	TPA	12/31/15		3/27/18	To be missed. The scope was not funded in FY 2014 or FY 2015, nor has the RI/FS Work Plan been approved. The Milestone date will be revised based on the issuance of the Rev 0 work plan.
M-016-110-T05	Implement System to Meet Drinking Water Stds. for U at 300-FF-5 OU	TPA	12/31/15		5/28/15	Ahead of schedule
M-024-66	DOE shall complete the construction of all wells listed for calendar year 2015	TPA	12/31/15		12/29/15	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)

December 2014  
CHPRC-2014-12, 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 79 radiological facility surveillances, completed 24 preventive maintenance (PM) activities, completed revision of Reduction-Oxidation S Plant (REDOX) Annual Surveillance high risk radiological work planning documentation, and completed annual Chemical Inventory.

## EMS Objectives and Target Status

None currently identified.

## TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	0	5	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 79 radiological facility surveillances
  - o 24 preventive maintenance (PM) activities
- Continued with asbestos abatement at steam line cut locations
- Completed revision of REDOX Annual Surveillance high risk radiological work planning documentation
- Completed field work for REDOX Annual Surveillance
- Sampled REDOX Tank 211-S Presumed Asbestos-Containing Material (PACM)
- Completed annual Chemical Inventory

## MAJOR ISSUES

None at this time.

### RISK MANAGEMENT STATUS

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

 Risk Response Effective  
 Risk Response Partially Effective  
 Risk Response Not Effective

 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  Risk Owner: Darin Corriell	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 in the month of December.
WSR-047: Unforeseen Waste Site Event  Risk Owner: Darin Corriell	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.			Construction yard demolition field work completed in the month of October (final waste disposition and sampling completed in December). No unplanned events encountered in the month of December.
D4-062: Unexpected Industrial Contamination  Risk Owner: Darin Corriell	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.			Monitoring emerging issues with facility roofs, contamination spread into surveillance paths, and other high risk facility conditions. Added mitigation efforts to the Integrated Priority List which is expected to be reviewed in January 2015. Transmitted letter to DOE-RL, in October, identifying the risk associated with the Redox being well beyond its design life and requesting authorization and funding to proceed with design. Decision on FY15 funding is expected by March 2015
D4-064: Aging Building Systems/Components  Risk Owner: Darin Corriell	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.			An analysis of deferred maintenance has identified potential increased frequency for some preventive maintenance activities. Costs associated with these additional maintenance activities have been included in the Integrated Priority/Buy Back list.
D4-067: Increased Asbestos Abatement  Risk Owner: Darin Corriell	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. Streamline abatement complete. Repairs were slated to complete in November/December, but resources were not available to complete identified work scope. A single overtime shift remains to complete repairs (due to availability of the lift equipment) and is expected to be completed in January/February.

## 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	0.7	0.7	0.7	(0.0)	-1.9%	(0.0)	-4.1%

Numbers are rounded to the nearest \$0.1M

**CM Schedule Performance: (+\$0.0M/-1.9%)**

Variance is within reporting threshold.

**CM Cost Performance: (+\$0.0M/-4.1%)**

Variance is within reporting 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	391.7	391.6	360.9	(0.2)	-0.0%	30.7	7.8	470.0	438.8	31.2

Numbers are rounded to the nearest \$0.1M

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

Variance is within reporting threshold.

**CTD Cost Performance: (+\$30.7M/+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 (\$2.6 million), Cold and Dark and Characterization/Waste Identification Form teams (\$4.0 million), lower than planned capital equipment costs (\$3.0 million) and efficiencies with Arid Lands Ecology (ALE) (\$3.7 million), North Slope Facilities (\$1.2 million), disposition of railcars D&D (\$2.1 million), and Industrial 7 Project (\$3.6 million); this is offset by increased material and equipment costs, unexpected asbestos levels, and schedule delays in other ARRA D4 Projects (-\$15.3 million). Efficiencies in Outer Area Waste Sites (\$6.7 million) are primarily due to Remove, Treat, and Dispose (RTD) O-Zone Waste Sites, 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 (\$7.4 million) contributed to the favorable cost variance.
- The remaining CTD favorable cost variance in base-funded work is due to efficiencies for waste site remediation and D4 activities as a result of utilization of existing site equipment and less resources (\$1.1 million), S&M costs less than expected (\$4.6 million), U Plant completion of the sampling of Cell 30 with less resources than planned (\$1.1 million), Program Management utilizing less resources (\$3.1 million) and under run in overhead allocations (\$1.8 million).

**Variance at Completion (+\$31.2M/+6.6%)**

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	FY2015		
	Projected Funding	Spending Forecast	Spend Variance
RL-0040	12.5	12.2	0.3

Numbers are rounded to the nearest \$0.1 million.

**Funds/Variance Analysis**

Projected funding is unchanged from the prior month. The change in FY2015 Spend Forecast from \$12.4 to \$12.2 is insignificant for the month.

**Critical Path Schedule**

Critical path analysis can be provided upon request.

**Baseline Change Requests**

None currently identified.

**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)

December 2014  
CHPRC-2014-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

Completed 100K Characterization Wells earthwork required for site prep; awarded contracts for drilling, field geology subcontract, and laboratory sample testing; initiated work enclosure and exhauster procurements; and resolved final details regarding work enclosure construction subcontract. Continued monthly radiological surveillances.

## EMS OBJECTIVES AND TARGET STATUS

None currently identified.

## TARGET ZERO PERFORMANCE

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

## KEY ACCOMPLISHMENTS

- 100K Characterization Wells:
  - o Completed the earthwork required for site prep
  - o Awarded drilling contract
  - o Awarded field geology subcontract
  - o Awarded laboratory sample testing contract
  - o Initiated work enclosure and exhauster procurements
  - o Resolved final details regarding work enclosure construction subcontract
- Completed Surveillances:
  - o Radiological – 31
- Radioactive Material Area (RMA) Consolidation:
  - o Final RMA to be consolidated is 70 percent complete. Work is currently on hold due to resource availability (working higher priority CHPRC scope).

## MAJOR ISSUES

None currently identified.

### RISK MANAGEMENT STATUS

Unassigned Risk  
Risk Passed  
New Risk  
Change

 Risk Response Effective  
 Risk Response Partially Effective  
 Risk Response Not Effective

 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  Risk Owner: Darin Corriell	Perform routine surveillances and maintenance of waste sites including herbicide application.			No concerns during the month of December.
KBC-043: Waste Site Remediation Completion Requirements  Risk Owner: Earl Prichard	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 groundwater.			Installation of two additional KE Characterization wells. UPR-100-K1; 116-KE-3. Completed design phase in August. Received CO from RL for construction and well installation. Subcontracts awarded and field work commenced in November 2014. Well development and sampling is expected to finish by September 2015 with the investigation report to follow in FY2016.
KBC-048: Unexpected Industrial Contamination  Risk Owner: Earl Prichard	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.			No concerns during the month of December.
KBC-ISS-004: Unforeseen Facility Event Impacts Safety or Environment  Risk Owner: Earl Prichard	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.			No concerns during the month of December.

### 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	0.4	0.2	0.3	0.2	-46.1%	(0.0)	-17.0%

Numbers are rounded to the nearest \$0.1M

**CM Schedule Performance (+\$0.2M/-46.1%)**

The variance is within reporting threshold.

**CM Cost Performance (-\$0.0M/-17.0%)**

The variance is within reporting threshold.

## 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	311.5	311.3	283.3	(0.1)	-0.0%	28.1	9.0%	394.7	364.9	29.8

Numbers are rounded to the nearest \$0.1M

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

The schedule variance is within threshold.

### CTD Cost Performance (+\$28.1M/+9.0%)

The positive 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 (+\$29.8M/+7.6%)

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	FY2015		
	Projected Funding	Spending Forecast	Spend Variance
RL-0041	6.8	8.2	(1.4)

Numbers are rounded to the nearest \$0.1M.

### Funds/Variance Analysis:

Projected Funding is unchanged from last month. The change in FY2015 Spending Forecast from \$6.3 to \$8.2 million is due to an update of the estimate for 100K boreholes installation that included a change in assumptions for sample processing (higher activity samples) and extended durations for well drilling due to high-risk nature of the drilling operations.

### Critical Path Schedule

Critical Path Analysis can be provided upon request.

### Baseline Change Requests

BCRA-PRC-15-014R0 - *HPIC Upload Updates December 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)

December 2014  
CHPRC-2014-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

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

## EMS OBJECTIVES AND TARGET STATUS

None currently identified.

## TARGET ZERO PERFORMANCE

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

## KEY ACCOMPLISHMENTS

- Completed:
  - o Annual Ignitable/Reactive waste inspection
  - o 23 Preventive Maintenance (PM) activities/operational surveillances
  - o Five radiological surveillances
  - o Five operational surveillances

## MAJOR ISSUES

None currently identified.

### RISK MANAGEMENT STATUS

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

 Risk Response Effective  Increased Confidence  
 Risk Response Partially Effective  No Change  
 Risk Response Not Effective  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			Septic line was broken in September, and was repaired in the month of November. Project will continue to perform Corrective Maintenance activities, monitor levels and pump septic tank as required.

### 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	0.1	0.1	0.1	-0.0	-5.1%	0.1	37.5%

Numbers are rounded to the nearest \$0.1M

**CM Schedule Performance: (-\$0.0M/-5.1%)**  
 The current period schedule variance is within threshold.

**CM Cost Performance: (+\$0.1M/+37.5%)**  
 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	18.6	18.6	15.3	(0.0)	-0.1%	3.3	17.7%	26.6	20.1	6.5

Numbers are rounded to the nearest \$0.1M

**CTD Schedule Performance (-\$0.0M/-0.1%)**  
 The schedule variance is within reporting thresholds.

**CTD Cost Performance (+\$3.3M/+17.7%)**  
 The cost variance reflects efficient use of resources to support deactivation activities.

**Variance at Completion (+\$6.5M/+24.5%)**  
 The Variance at Completion is within reporting thresholds.

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

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

FY2015			
RL-0042 FFTF Closure	Projected Funding	Spending Forecast	Spend Variance
RL-0042	1.4	1.3	0.1

Numbers are rounded to the nearest \$0.1 million

### Funds Analysis

Project funding and FY2015 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

None at this time.

## 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



December 2014  
CHPRC-2014-12, 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 / 11 / 24								
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788			b. PHASE			b. TO (YYYYMMDD) 2014 / 12 / 21								
			c. TYPE CPAF			d. SHARE RATIO			c. EVMS ACCEPTANCE NO YES X 9/18/2009								
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									
	5,468,189	14,474	228,503	5,696,692	5,553,299	5,696,692	5,553,299										
6. ESTIMATED COST AT COMPLETION																	
a. BEST CASE			MANAGEMENT ESTIMATE AT COMPLETION (1)			CONTRACT BUDGET BASE (2)			VARIANCE (3)			7. AUTHORIZED CONTRACTOR REPRESENTATIVE					
			5,246,356									a. NAME (Last, First, Middle Initial) Corman, R. K.					
b. WORST CASE			5,479,803									b. TITLE Prime Contract Manager					
c. MOST LIKELY			5,324,796			5,482,663			(157,867)			c. SIGNATURE					
												d. DATE SIGNED 12/21/2014					
8. PERFORMANCE DATA																	
WBS[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)							
ITEM (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)	
011 RL-11 NM Stabilization and Disposition PFP	8,811	7,961	8,259	(850)	(298)	755,714	724,931	761,952	(30,783)	(37,021)	0	0	0	937,583	967,039	(29,455)	
012 RL-12 SNF Stabilization and Disposition	5,161	4,248	4,389	(913)	(141)	453,245	457,924	470,639	4,679	(12,715)	0	0	0	692,663	720,188	(27,524)	
013 RL-13 Solid Waste Stabilization & Disposition	7,593	8,351	6,014	758	2,337	900,336	902,242	863,032	1,907	39,210	0	0	0	1,352,716	1,263,669	89,046	
030 RL-30 Soil & Wtr Remediatn Grndwtr/Vadose Zone	4,340	9,640	8,565	5,299	1,074	1,040,716	1,041,069	1,026,579	353	14,490	0	0	0	1,521,534	1,471,683	49,851	
040 RL-40 Nuclear Facility D&D Remainder of Hanford	724	710	739	(14)	(29)	391,727	391,574	360,867	(154)	30,707	0	0	0	469,967	438,798	31,169	
041 RL-41 Nuclear Facility D&D - River Corridor	446	240	281	(206)	(41)	311,450	311,333	283,281	(117)	28,052	0	0	0	394,735	364,913	29,822	
042 RL-42 FFTF Closure	145	138	86	(7)	52	18,594	18,566	15,278	(27)	3,289	0	0	0	26,577	20,066	6,511	
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														2,211	0	0	
e. Sub Total	27,220	31,288	28,334	4,068	2,954	3,871,781	3,847,639	3,781,626	(24,142)	66,012	0	0	0	5,397,987	5,246,356	151,631	
f. Management Reserve														78,440			
g. Total	27,220	31,288	28,334	4,068	2,954	3,871,781	3,847,639	3,781,626	(24,142)	66,012	0	0	0	5,476,426			
9. Reconciliation to CBB																	
a. Variance Adjustment																	
b. Total Contract Variance									(24,142)	66,012				5,476,426	5,246,356	230,071	

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) 2014 / 11 / 24								
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788			b. PHASE			b. TO (YYYYMMDD) 2014 / 12 / 21								
		c. TYPE CPAF			d. SHARE RATIO			c. EVMS ACCEPTANCE NO YES X 9/18/2009								
5. PERFORMANCE DATA																
FOC  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)						
<b>34 - Envr Program &amp; Strategic Planning</b>																
340 - Environmental Prog & Regl Mgt	551	489	464	(62)	25	50,056	50,485	46,757	429	3,728	0	0	0	83,134	72,811	10,323
	551	489	464	(62)	25	50,056	50,485	46,757	429	3,728	0	0	0	83,134	72,811	10,323
<b>35 - Business Services</b>																
35D - Contract Mgmt & Facility Svcs	0	0	0	0	0	23,047	23,047	23,520	0	(473)	0	0	0	23,047	23,520	(473)
35K - PRC Finance	0	0	0	0	0	449,477	449,477	425,102	0	24,375	0	0	0	449,477	425,102	24,375
	0	0	0	0	0	472,524	472,524	448,622	0	23,902	0	0	0	472,524	448,622	23,902
<b>3B - PFP Closure</b>																
3B0 - PFP Close/BOSS D&D & Infrastruc	1,475	1,312	1,861	(164)	(549)	142,706	132,230	152,947	(10,477)	(20,717)	0	0	0	201,579	225,997	(24,418)
3B3 - Project Management/Subcontracts	4,204	2,809	2,818	(1,394)	(8)	153,216	142,813	155,864	(10,404)	(13,052)	0	0	0	192,656	205,032	(12,376)
3B4 - Engrg Nuc Saf Plng&Wrk Control	1,256	1,256	941	0	315	51,684	51,684	42,941	(0)	8,743	0	0	0	74,095	60,809	13,286
3B7 - Environmental & Waste	596	611	582	16	29	55,676	54,760	44,566	(915)	10,194	0	0	0	73,244	67,870	5,374
3BA - Project Mgmt D&D	904	903	912	(1)	(8)	151,940	151,939	154,640	(1)	(2,701)	0	0	0	168,033	174,215	(6,182)
3BB - PFP D4 Deputy Project Mgmt	376	1,069	1,145	693	(76)	114,343	105,356	132,047	(8,987)	(26,691)	0	0	0	141,827	154,170	(12,343)
3BD - PFP Cold & Dark	0	0	0	0	0	0	0	0	(0)	(0)	0	0	0	0	0	(0)
	8,811	7,961	8,259	(850)	(298)	669,565	638,782	683,006	(30,783)	(44,224)	0	0	0	851,435	888,093	(36,658)
<b>3C - Decom Waste Fuels &amp; Remed Svcs</b>																
36X - Support to 3C - W&FMP/D&D Project	134	218	243	84	(25)	2,196	2,156	1,733	(40)	423	0	0	0	3,398	2,695	703
38X - Support to 3C - W&FMP/D&D Project	1,827	1,485	987	(341)	498	42,117	45,132	66,202	3,016	(21,069)	0	0	0	90,721	126,858	(36,137)
3AD - Sludge Treatment Project	3,334	2,763	3,402	(572)	(640)	356,866	358,529	350,779	1,663	7,750	0	0	0	547,680	539,672	8,008
3BX - Support to 3C - W&FMP/D&D Project	438	232	270	(206)	(38)	247,802	247,685	225,440	(117)	22,245	0	0	0	323,642	299,612	24,031
3C4 - Waste & Fuels Project Controls	1,909	1,923	1,437	13	486	203,785	203,575	205,387	(210)	(1,812)	0	0	0	318,907	298,505	20,402
3C5 - TRU Project	0	0	0	0	0	49,140	49,140	52,386	(0)	(3,247)	0	0	0	49,140	52,386	(3,247)
3C9 - Liquid & Fuels Storage	2,843	2,656	2,306	(187)	350	194,777	195,221	182,258	444	12,963	0	0	0	397,684	386,712	10,973
3CA - W&FMP Engineering	0	0	0	0	0	0	0	1	0	(1)	0	0	0	0	1	(1)
3CD - Waste Disposition	3,583	4,410	2,865	827	1,545	739,832	741,365	696,614	1,533	44,751	0	0	0	966,650	888,897	77,752
	14,069	13,687	11,510	(382)	2,177	1,836,515	1,842,803	1,780,801	6,288	62,002	0	0	0	2,697,822	2,595,339	102,483
<b>3D - Soil &amp; Groundwater Remediation</b>																
3D0 - Soil & Groundwater Remediation	1,523	2,201	1,035	678	1,166	106,065	106,886	104,435	820	2,451	0	0	0	194,769	170,604	24,165
3D2 - GW Remediation Support	1,942	1,311	1,407	(632)	(97)	155,855	155,093	144,802	(762)	10,291	0	0	0	257,061	240,799	16,262
3D4 - GW Operations	1,044	1,039	972	(6)	66	101,714	101,688	88,850	(26)	12,839	0	0	0	164,492	150,347	14,145
3D8 - GW Analysis and Reporting	(721)	4,600	4,687	5,321	(87)	479,487	479,377	484,353	(109)	(4,976)	0	0	0	674,539	679,741	(5,202)
	3,789	9,151	8,101	5,361	1,049	843,120	843,044	822,439	(76)	20,605	0	0	0	1,290,860	1,241,490	49,370
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														2,211	0	0
e. Sub Total	27,220	31,288	28,334	4,068	2,954	3,871,781	3,847,639	3,781,626	(24,142)	66,012	0	0	0	5,397,987	5,246,356	149,420
f. Management Resrv.														78,440		
g. Total	27,220	31,288	28,334	4,068	2,954	3,871,781	3,847,639	3,781,626	(24,142)	66,012	0	0	0	5,476,427		

FORMAT 3, DD FORM 2734/3, BASELINE

December 2014 Monthly Report

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE													DOLLARS IN THOUSANDS			Form Approved OMB No. 0704-0188		
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:			3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009			4. REPORT PERIOD a. FROM: 2014/11/24 b. TO: 2014/12/21									
5. CONTRACT DATA																		
a. ORIGINAL NEGOTIATED COST 4,312,366			b. NEGOTIATED CONTRACT CHANGE \$1,155,823		c. CURRENT NEGOTIATED COST (A + B) \$5,468,189		d. ESTIMATED COST AUTH UNPRICED WORK \$14,474		e. CONTRACT BUDGET BASE (C + D) \$5,482,663		f. TOTAL ALLOCATED BUDGET \$5,476,427		g. DIFFERENCE (E - F) \$6,236					
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																		
ITEM  (1)			BCWS CUM TO DATE (2)		BCWS FOR REPORT PERIOD (3)		SIX MONTH FORECAST								UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)		
							+1 Jan-15 (4)	+2 Feb-15 (5)	+3 Mar-15 (6)	+4 Apr-15 (7)	+5 May-15 (8)	+6 Jun-15 (9)	FY09-13 (10)	FY14 (11)			FY15 (12)	FY16 (13)
a. PM BASELINE (BEGIN OF PERIOD)			3,876,000	31,440	38,792	33,536	35,796	45,843	37,855	35,729	3,391,477	391,653	455,382	431,775	357,470	365,316	7,282	5,400,354
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																		
BCR-013-15-002R0 - FY2015 Shipment/Repackaging of Large TRU Waste Box from CWC													1,672			(1,672)		(0)
BCR-013-15-003R0 - Cs/Sr Dry Storage Planning Package Adjustment													(2,452)	2,529				76
BCR-013-15-004R0 - T Plant Ramp-up and Base Operations															13,674	16		0
BCR-030-15-007R0 - Re-Plan of 100-NR-2 Apatite Barrier Expansion and Jet Injection Activities													(12,623)	(211)				856
BCR-030-15-008R0 - CO#261, Design and Construction of Unloading Station and Transfer Tank													250					250
BCR-030-15-009R0 - CO#262, 200W P&T System Membrane Bioreactor Additions													520					520
BCR-030-15-010R0 - CO#264, 200-UP-1 Uranium Treatment Inside 200W P&T Facility													1,000					1,000
BCR-PRC-15-015R0 - Undistributed Budget Adjustments December 2014																(5,070)		(5,070)
c. PM BASELINE (END OF PERIOD)			3,871,781	27,220	37,938	38,825	35,079	44,801	36,988	35,049	3,391,477	391,653	443,749	434,093	371,144	363,660	2,211	5,397,987
7. MANAGEMENT RESERVE																		78,440
8. TOTAL																		5,476,427

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

CLASSIFICATION (When Filled In)											
CONTRACT PERFORMANCE REPORT FORMAT 4 - STAFFING										FORM APPROVED OMB No. 0704-0188	
1. CONTRACTOR		2. CONTRACT				3. PROGRAM			4. REPORT PERIOD		
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract				a. NAME Plateau Remediation Contract			a. FROM (YYYYMMDD) 2014 / 11 / 24		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD)				
		c. TYPE CPAF		d. SHARE RATIO			c. EVMS ACCEPTANCE YES 9/18/2009		2014 / 12 / 21		
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 Jan (4)	+2 Feb (5)	+3 Mar (6)	+4 Apr (7)	+5 May (8)	+6 Jun (9)	FY15-18 (13)		
<b>300 - Office of the President</b>											
35X - Support to President	5	446	5	5	5	5	5	5	5	5	200
	<b>5</b>	<b>446</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>200</b>
<b>303 - Internal Audit</b>											
303 - Internal Audit	5	314	4	4	4	5	5	5	5	5	195
	<b>5</b>	<b>314</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>195</b>
<b>304 - General Counsel</b>											
304 - General Counsel	4	304	4	4	4	4	4	4	4	4	188
	<b>4</b>	<b>304</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>188</b>
<b>31 - Communications</b>											
310 - Communications	8	729	9	9	9	9	9	9	9	9	342
	<b>8</b>	<b>729</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>342</b>
<b>32 - Safety, Health, Security &amp; Quality</b>											
320 - Safety Health Security/Quality	26	2,075	27	27	27	25	25	25	25	25	979
321 - RAD PRO/Emergency Prep	8	823	9	9	9	9	9	9	9	9	345
322 - Nuclear Ops Supp & Compliance	7	737	8	8	8	8	8	8	8	8	304
324 - Quality Assurance	15	1,691	17	17	17	17	17	17	17	17	656
	<b>56</b>	<b>5,325</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>2,284</b>
<b>34 - Environmental Prog &amp; Strategic Planning</b>											
340 - Environmental Prog & Regl Mgt	38	2,431	40	40	40	39	39	40	40	40	1,742
341 - Environmental Protection	0	1,000	0	0	0	0	0	0	0	0	0
	<b>38</b>	<b>3,432</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>39</b>	<b>39</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>1,742</b>
<b>35 - Business Services</b>											
35D - Contract Mgmt & Facility Srvcs	24	3,227	28	28	28	28	28	28	28	28	1,075
35F - Industrial Relations	4	371	4	4	4	4	5	5	5	5	199
35H - Human Resources	15	1,067	16	15	14	14	14	14	14	14	559
35K - PRC Finance	12	973	13	13	13	13	13	13	13	13	494
	<b>56</b>	<b>5,639</b>	<b>61</b>	<b>60</b>	<b>59</b>	<b>60</b>	<b>60</b>	<b>59</b>	<b>59</b>	<b>59</b>	<b>2,327</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
361 - Cont Compl & Change Mgmt	11	594	15	15	15	15	15	15	15	15	498
362 - Strategic Pln & Mgmt	14	1,292	14	16	16	19	19	19	19	19	741
363 - EVMS Compl & Rptg	15	1,337	15	18	18	19	19	19	19	19	577
	<b>40</b>	<b>3,224</b>	<b>45</b>	<b>49</b>	<b>49</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>1,816</b>
<b>38 - Project Technical Services</b>											
381 - Central Engineering	6	580	9	9	10	10	10	9	9	9	357
382 - Training & Procedures	9	2,120	10	10	10	10	10	10	10	10	380
383 - Operations Programs	6	789	7	7	7	7	7	7	7	7	266
384 - Project Delivery	13	1,104	10	10	10	10	10	10	10	10	386
	<b>35</b>	<b>4,593</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>37</b>	<b>1,389</b>
<b>3B - PFP Closure</b>											
3B0 - PFP Close/BOSS D&D & Infastruc	55	5,065	56	56	58	59	57	57	52	52	1,427
3B3 - Project Management/Subcontracts	103	7,594	128	136	116	126	122	114	90	90	1,025
3B4 - Engrg Nuc Saf Plng&Wrk Control	53	2,237	58	58	58	58	58	58	58	58	464
3B7 - Environmental & Waste	31	2,725	33	33	36	34	33	33	33	33	568
3BA - Project Mgmt D&D	63	10,918	64	64	64	64	64	64	64	64	672
3BB - PFP D4 Deputy Project Mgmt	81	8,997	97	109	85	108	96	96	84	84	325
3BD - PFP Cold & Dark	0	0	0	0	0	0	0	0	0	0	0
	<b>386</b>	<b>37,537</b>	<b>436</b>	<b>456</b>	<b>418</b>	<b>449</b>	<b>430</b>	<b>423</b>	<b>382</b>	<b>382</b>	<b>4,480</b>
<b>3C - W&amp;FMP/D&amp;D Project</b>											
36X - Support to 3C - W&FMP/D&D Project	9	49	7	7	5	0	0	0	0	0	0
38X - Support to 3C - W&FMP/D&D Project	52	1,220	70	70	70	70	70	70	77	77	1,299
3AD - Sludge Treatment Project	128	15,733	140	140	140	143	145	142	142	142	6,130
3BX - Support to 3C - W&FMP/D&D Project	14	7,135	13	15	14	14	14	14	9	9	2,443
3C4 - Waste & Fuels Project Controls	58	6,635	53	60	61	58	67	67	67	67	2,607
3C5 - TRU Project	0	582	0	0	0	0	0	0	0	0	0
3C9 - Liquid & Fuels Storage	133	11,255	150	148	147	95	77	77	77	77	4,153
3CD - Waste Disposition	132	33,806	134	161	156	160	160	158	151	151	8,000
	<b>527</b>	<b>76,417</b>	<b>567</b>	<b>601</b>	<b>592</b>	<b>540</b>	<b>533</b>	<b>529</b>	<b>523</b>	<b>523</b>	<b>24,631</b>
<b>3D - Soil &amp; Groundwater Remediation</b>											
3D0 - Soil & Groundwater Remediation	37	2,983	36	38	38	38	38	38	38	38	1,615
3D2 - GW Remediation Support	57	5,741	60	65	68	69	71	69	68	68	2,490
3D4 - GW Operations	57	5,015	56	56	56	56	56	56	56	56	2,129
3D8 - GW Analysis and Reporting	168	11,862	142	137	142	142	142	133	134	134	4,689
	<b>319</b>	<b>25,601</b>	<b>295</b>	<b>296</b>	<b>304</b>	<b>305</b>	<b>307</b>	<b>297</b>	<b>296</b>	<b>296</b>	<b>10,922</b>
<b>Grand Totals:</b>	<b>1,476</b>	<b>163,563</b>	<b>1,561</b>	<b>1,620</b>	<b>1,582</b>	<b>1,565</b>	<b>1,540</b>	<b>1,518</b>	<b>1,471</b>	<b>1,471</b>	<b>50,514</b>



**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 +\$151.6 million and +2.8% and is within reporting thresholds.

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

CPs - In Process		
	Total Authorized Unpriced Work	\$14,474
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
<b>Grand Total Adjustments</b>		<b>\$14,474</b>

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

**MR Utilization**

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

There were no changes to MR during December.

**Fee Activity**

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

There were no changes to Fee during December.

**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> 1/15/2015	<b>Approved by:</b>	<b>Date:</b>
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# Appendix B

## Project Services and Support (WBS 000)



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

**M. A. Wright**  
Vice President for  
Project Technical  
Services

December 2015  
CHPRC-2014-12, 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 Number	Objective	Target	Due Date	Status
15-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 82% by compressing occupancy and vacating underutilized facilities. Vacated/unoccupied facilities declared unusable and designated inactive placed in Care Taker system.	9/30/15	10%
15-EMS-ADMIN-OB2-T1	Reduce the generation and/or toxicity of waste at the source.	Incorporate waste minimization language into at least 90% of CHPRC onsite/offsite event contracts. Train staff on "green" event planning, contract terms, and policy.	9/30/15	0%
15-EMS-ADMIN-OB3-T1	Maximize the acquisition and use of environmentally preferable products in the conduct of operations.	Establish green catalogs for products beyond office supply purchases on the web site and assuring the GSA supplier has been educated on this objective.	10/9/15	0%
15-EMS-ADMIN-OB3-T2	Reduce generation of paper waste.	Migrate 95% of all record generation to paperless. All records will be reviewed and moved into IDMS for permanent storage.	9/30/15	75%
15-EMS-PTS-OB1-T1	Reduce the potential generation and release of toxic, hazardous, and non-regulated chemical materials to the environment and evaluate for compliance with universal waste and other recycling requirements.	Monitor and evaluate spill prevention program to reduce and/or eliminate spills to the environment by surveillances, on-going training, and spill prevention techniques and ensure universal waste and other recycling requirements are being compliantly accumulated, stored, labeled, packaged, and tracked.	9/30/15	28%
15-EMS-ADMIN-OB4-T1 (Draft)	To expedite chemical Reportable Quantity (RQ) identification by the CHPRC single point of contact (SPOC) during a release or spill.	Develop RQ table for the single point of contact (SPOC) at CHPRC to use when evaluating a release or spill.	TBD	TBD

## 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	10	12/16/2014 – Employee was exiting office trailer and tripped walking down exit ramp mildly spraining ankle. Employee was taken to HPMC and returned to work without restrictions. (23536)
Near-Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

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

- SHS&Q activities provide support and technical services to all CHPRC projects and central management of crosscutting services. There were no SHS&Q Recordable injuries or First Aid cases during December.
  - 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 have been completed on 640 CHPRC facilities. Characterizations of facilities are being performed as identified through the assessment process. Beryllium characterizations have been completed on 141 CHPRC facilities. An additional 59 facilities have been sampled. For the month of January, we have facility assessments scheduled for 52 items and characterization sampling scheduled for 78 items.
    - Continued working with the Soil and Groundwater Remediation Project (S&GRP) Sample Management & Reporting (SMR) office to resolve issues with off-site lab analysis.
    - Continued support to Project Technical Services (PTS) with oversight of IH monitoring and sampling activities at the 100K Annex project.
    - Continued working with Project Facility Chemical Custodians (FCC) to complete qualification cards.
    - Continued to provide ergonomic assessments for Functional Organizations, the Plutonium Finishing Plant (PFP), and S&GRP.
    - Provided technical assistance to PFP and DWF&RS for asbestos work activities.
    - Continued to provide technical support and guidance to DWF&RS with Confined Space classification and controls.
    - Provided support to DWF&RS in the development of an Industrial Hygiene Exposure Assessment for vapor issues at the Central Waste Complex (CWC).
    - Continued to provide support to PFP regarding fence installation around a WIDS site.
    - Continued to provide support to PFP in resolving moisture issues with the PremAire system.
    - Continued working with other Hanford Site contractors to develop consistent ergonomic controls.

- o Radiological Control accomplishments:
  - Developed revised radiological criteria for convening Hazard Review Board per request from PFP management.
  - Continued work with LMSI on Survey Simple upgrade to web-based application with the new version scheduled for release in March 2015.
  - Conducted RWP/AMW Improvements Working Group with representatives from each Project.
  - Supported ETF transition planning activities.
  - Conducted quarterly company-level ALARA meeting.
  - Continued progress in addressing radiological protection concerns identified by 100K personnel during FWS/FLM meetings.
  - Finalized contract and schedule details for on-site Internal Dosimetry course.
- o Nuclear Safety deliverables prepared and transmitted to RL in December include:
  - Documented Safety Analysis:
    - Letter, CHPRC-1405088, December 8, 2014, *Transmittal of HNF-13830, Revision 4A, Documented Safety Analysis for the Reduction-Oxidation Facility.*
    - Letter, CHPRC-1405125, December 9, 2014, *Transmittal of the 2015 Annual Update of the 224-B Safety Basis and Unreviewed Safety Question Determination Summary.*
  - Letters received from RL in December include:
    - Letter, 15-NSD-0004\_RL, dated December 5, 2014, *Transmittal of PRC-NS-00004, Revision 2, CH2M HILL Plateau Remediation Company (CHPRC) Criticality Safety Program Description Document.*
    - Letter, 15-NSD-0003\_RL, dated December 10, 2014, *Transmittal of the Canister Storage Building (CSB) 2014 Safety Basis Annual Update, the Annual Unreviewed Safety Question (USQ) Report, and the List of Safety Basis Documents.*
    - Letter, 15-NSD-0016\_RL, dated December 31, 2014, *Transmittal of the Capsule Extended Storage Project (CESP) Safety Design Strategy (SDS), CHPRC-02236, Revision 0, for Review and Approval.*
    - Letter, 14-NSD-0091\_RL, dated December 31, 2014, *Transmittal of Surveillance on Confinement Ventilation System Program HEPA Filter Service Life (S-14-NSD-PRC-009).*
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
  - 232 Condition Reports (CRs) were screened in December:
    - 1 Significant issues identified
    - 1 Adverse issues identified
    - 121 Track Until Fixed (TUF) issues identified
    - 46 Trend Only (TO) items identified
    - 63 Opportunity for Improvement (OFI) items identified
    - 0 Screen Out
  - 165 CRs administratively closed.
  - 410 CR actions administratively closed.
  - Provided Course 600082, *Responsible Manager, Issues Management*, to 17 employees.
  - Provided Course 080983, *DOE Enforcement Program (PAAA/WSH) Overview*, to 9 employees.
  - Completed cause evaluation for CR-2014-1495, *Common Cause / Root Cause Evaluation of Earned Value Management Assessments.*
  - Supported development of Corrective Action Plan Addendum for PFP access control issues.
  - Provided lead evaluator support to PFP on five Apparent Cause evaluations associated with

- access control issues.
- One external Lessons Learned was submitted to OPEX.
- Coordinated conference call to discuss REDOX facility seismic collapse hazard DSA/analysis and its potential impact on the 222-S Laboratory.
- Initiated coordination of a DNFSB review of Sludge Treatment Plant Nuclear Safety initiatives, currently scheduled to begin February 2015.
- Coordinated the monthly CHPRC/DNFSB Information Request Status call.
- Coordinated the monthly DNFSB conference call concerning the Sludge Treatment Plant.
- Twenty-Seven documents were provided in response to DNFSB requests for information.
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
  - Completed Certification for a Lead Assessor.
  - Completed SHS&Q-2015-SURV-15092, Review of Business Services Contract Directive Requirements for the Flow-down and Performance of Programmatic Assessments/Reviews/Evaluations.
  - Participated in the INPO led Safety Culture Assessment training in Albuquerque in preparation for the safety culture assessment of WIPP.
  - Launched the new CHPRC Assessment Fundamentals computer-based training course.
  - Completed updates to the Management Observation Program and Assessment Programs procedures and submitted to Procedures to support an early January issuance.
  - Initiated planning for 10 CFR 835, Subpart J, Radiation Safety Training, surveillance activity scheduled for January through March.
  - Provided mentoring and feedback to assessors and responsible managers. Specific mentoring was provided to project and program members planning assessment activities to better define activity purpose, scope, and to ensure that lines of inquiry supported the intent of the assessment.
  - Supported the Waste and Fuels organization in preparations for repackaging the concrete waste box at Central Waste Complex.
  - Supported the Ground Water Project and Central Engineering in the establishment of inspection criteria for bonding of double wall HDPE pipe to ensure ASME B31.3 compliance.
  - Continued work with Lockheed Martin Information Services and the CHPRC Strategic Planning organization in the resolution of OCRWM records issues.
  - Supported the Waste and Fuels organization in the analysis of issues arising from the Commercial Grade Dedication of components for the KW Annex ECRTS modules.
- Status of SHS&Q Focus Areas:
  - o **Issue:** Beryllium (Be) program assessment findings from DOE-HQ, Office of Safety, Health and Security Independent Oversight Inspection report.
  - o **Status:** Implementing Revision 2A across CHPRC. Supporting RL Be KPG recently identified for FY2015 with completion of 3 of 4 CHPRC responsible Be CAP products.
  - o **Action:** Beryllium facility assessments and characterization sampling are being conducted. Beryllium facility assessments have been completed on 640 CHPRC facilities. Additional personnel resources from MSA are being utilized for conducting Be assessments/characterization in PRC facilities.

- o **Issue:** Accident & Injury Reduction.
- o **Status:** Continue investigating recordable, DART, and first aid injuries to determine cause, prevention, reduction, and recurrence.
- o **Action:** Continuing to interface with project personnel, supporting EZACs and project safety meetings for continued focus on injury prevention. Improved TRC/DART rate trends are demonstrating that these efforts are being effective.
- o **Issue:** PFP Value Engineering (VE) Initiatives Path Forward.
- o **Status:** Engaged PFP project personnel with SHS&Q central group SMEs.
- o **Action:** Supporting PFP initiatives, supplied breathing air system implementation, new NDA equipment and process upgrades, and development of DSA Revision 12. NDA path forward to present to RL in December. New NDA equipment purchased, calibrated, and deployed in PFP. New NDA program manager assigned to support process in PFP.

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

- **Compliance Status**

- o A small leak from a drum at CWC was discovered during a routine inspection on December 9, 2014. This event was reported to Ecology who has responded with two inspections, and multiple requests for information. Ecology is shown interest in the reporting sequence and designation process.
- o Ecology provided regulatory interpretations regarding the storage of dangerous waste in satellite accumulation areas. These interpretations appear to be in conflict with Dangerous Waste regulations and a guidance document, and a response seeking clarification will be returned to Ecology. This response is being coordinated with other Hanford contractors as this is a side-wide issue.

- **RCRA Permitting Progress**

- o DOE-RL has directed WRPS to prepare the RCRA permit modification to transfer LERF/ETF to their scope. WRPS will update the Part A form which may trigger discussions with Ecology on the appropriate permit transfer methodology.
- o DOE-RL continued to lead discussions on revisions of the site-wide Emergency Management Plan. Progress has been made on clarifying language and response actions. These discussions are to continue into January.
- o Ecology has indicated that they will delay work on the Rev 9 of the RCRA site-wide permit. Instead, they will focus on providing permit templates that will guide the content and structure of permit sections. So far, only one permit guide has been issued as a draft in 2014.

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

- **Assessment Program**

- o A compliance assessment of EPCRA requirements was completed. This assessment identified five findings and 10 opportunities for improvement which were entered into the CHPRC Issues Management System for implementation of appropriate corrective actions.
- o Tracking is continuing on the condition reports that resulted from a corporate assessment focused on SWOC waste management processes. Two findings and 18 opportunities for improvement (OFI) resulted from the assessment. Through December, one of two findings had been closed and 12 of the 18 OFIs had been closed.

- **Environmental Requirements Management**

- o Environmental requirements from 58 verified sources have been uploaded into DOORS\_PRC. The sources include S&GRP and DWF&RS CERCLA response action documents, federal and state regulations, and the Hanford Facility RCRA Permit.
- o CH2M HILL corporate resources are providing support to the identification and verification of environmental requirements from 37 federal, state and DOE sources.

- o A schedule has been developed for tracking status of work efforts in establishing an Operating Records management system and dashboard.

### **Business Services**

- **Acquisition Planning**

- o Supported procurement interface with DWF&RS for the WESF Stabilization/Ventilation Project W-130 and five upcoming procurement activities to support FY2015 work scope.
- o Submitted Small Business Plan annual update to RL on December 31, 2014.
- o Supported Projects and Safety Organization with contract releases and issues related to Flame Resistant Clothing.

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

- o Vacated building 1713H in preparation to deactivate and decommission the facility.

- **Finance**

- o Continued to reply to KPMG requests for data related to the ongoing FY2009-FY2013 incurred cost audits. Provided majority of FY12-13 initial support.
- o December month end completed with no suspensions.
- o Submitted 3<sup>rd</sup> Quarter FY2015 Conference Travel Management Request.
- o Worked with RL Finance and CHPRC Projects on capital funding definition/guidance/process improvements
- o Provided Timecard Topic presentation at three CHPRC Project FWS/All Hands meetings

- **Human Resources**

- o Performed year-end compensation review and implemented 17 special salary adjustment based on market or performance.

- **Material Services**

- o Completed corrective actions associated with the KPMG Procurement System review regarding P-Card transactions with Mission Support Alliance eStore vendors. CHPRC committed to conduct an assessment of eStore vendor pricing to demonstrate prices paid were fair and reasonable. Nineteen transactions and purchases of three commodities totaling \$2,033,423 were compared. Results confirmed that the prices CHPRC paid to eStore vendors were in fact fair and reasonable. The prices were favorable to the Government by an average of 34 percent. Assessment results were transmitted to RL on December 31, 2014.

- **Procurement**

- o Awarded/amended 93 contracts with a total value of \$5.43 million. Additionally, awarded 189 new material purchase orders valued at \$1.2 million to support ongoing project objectives.
- o At the end of the first 75 months of the PRC, procurement volume has been significant; \$2.16 billion in contract activity has been recorded with approximately 50.45 percent, or \$1.094 billion, in awards to small businesses. This includes 6,684 contract releases, 17,252 purchase orders, and 213,812 P-Card transactions.
- o On December 3, 2014, Contract 48772-10 was awarded to Stillwater, LLC for the “Drilling of 2 Wells and 1 Borehole in the 300-FF-5 OU” in the amount of \$60,000.00 on a firm fixed price basis. This was a result of a competitive solicitation Request for Proposal (RFP) 271845 which was provided to the CHPRC Well Drilling Services Basic Ordering Agreement (BOA) holders.
- o On December 4, 2014, Contract 53921-003 was awarded to Columbia Energy & Environmental Services for the “291-T Prefilter Housing” in the amount of \$173,250.00 on a firm fixed price basis. This was as a result of competitive solicitation RFP 272574 which was provided to the CHPRC Safety Significant BOA holders.
- o On December 18, 2014, Contract 48768-09 was awarded to Carpenter Drilling for the “Drilling Support for Installing 2 Wells in the 100-KR-4 OU” in the amount of \$388,600.00 on a firm fixed unit rate basis. This was a result of a competitive solicitation RFP 271934 which was provided to the CHPRC Well Drilling Services BOA holders.

- o On December 29, 2014, Master Contract 55933-00 was awarded to Stoller Newport News Nuclear for the “Geophysical Logging Services” on a firm fixed unit rate basis. The result was of a competitive solicitation that was posted via CHPRC internet and Federal Business Opportunities (FedBizOpps.gov) website. Release 01 was awarded at the not-to-exceed value of \$1,989,794.30 for the performance period ending September 30, 2017.

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

#### • Contracts Compliance and Change Management

- o In December, Prime Contracts Compliance received and processed eight (8) contract modifications (numbers 376-381, and 383-384) from RL. Correspondence Review received and determined the distribution for 69 incoming letters/documents. The Prime Contracts Compliance Manager reviewed 51 outgoing correspondence packages.
- o There was one Notice of Change (NOC) letter provided to RL in December related to capital funds associated with CO 256 for “installation-ready activities associated with two pipelines from 200-BP-5 to the 200-West Pump and Treatment Facility.
- o Submitted completion package for FY2015 Performance Measure PM-12-5, Sludge Treatment Project Annex Construction – Building Shell (Part A).
- o Processed one Request for Services request (RF2050) for Puget Sound Naval Shipyard FY15 Level of Effort support.
- o Briefed RL on PMB Alignment to Contract and proposed CLIN 7 to PMB adjustments.
- o Obtained RL CO authorization for large box repackaging on December 1, 2014.
- o Received RL FY2015 fee draw down letter.

#### Change Proposal/REA Summary

Change Proposals submitted on or ahead of due date	Request for Equitable Adjustments submitted	Supplemental Information submitted	Change Proposals definitized on or ahead of 180-day metric	Other Proposals Definitized
3	0	3	2	0

- o Estimating & Program Support provided the following support to the Projects:
  - Plutonium Finishing Plant (PFP):
    - Initiated estimates in support of the following work: Air interlock door installation; core drilling for PFP walls; and PRF floor grouting.
  - Sludge Treatment Project (STP):
    - Initiated the effort to revise REA 012 1454 - *Sludge Treatment Project Work Scope Priorities and Sequestration Impacts* to include only the impacts incurred from the FY2013 Sequestration.
  - Decommissioning, Waste, Fuels & Remediation Services (DWF&RS) Project
    - Submitted a Change Proposal in response to CO 263 – *ERDF Leachate Transfer Pipeline Construction*, on December 3, 2014.
    - Submitted an update to the final cost incurred during work performed in association with CO 258 – *Integrated Disposal Facility Performance Assessment Turnover Support*, on December 31, 2014.
  - Soil & Groundwater Remediation Project (S&GRP):
    - Definitized two Change Proposals:
      - o CO 256 - 200-BP-5, *Design and Installation Ready Activities*, on December 16, 2015.
      - o CO 257 – 200-UP-1 *Iodine Treatment Design, Installation and O&M*, on

December 15, 2015.

- Submitted updated pricing for Change Proposal CP 030 260 1496 – *100-NR-2 Bioventing* after discussion and clarification with RL with respect to the work scope to be performed. Additional estimate basis information supporting the estimate resources was submitted to RL on December 31, 2014.
- Submitted a Change Proposal in response to CO 264 – *200-UP-1 Uranium Treatment Inside 200 West P&T*, on December 4, 2014.
- Submitted a modified Change Proposal in response to CO 262, 200 West Pump & Treatment System Membrane Bioreactor Additions, on December 18, 2014. The modified proposal contained the preliminary estimate with accompanying Technical Approach and Basis of Estimate, along with the complete backup documentation. CHPRC will submit actual cost incurred in the planning effort by February 26, 2015.
- Project Technical Support:
  - Initiated an estimate that will support procurement of construction services to conduct interior renovations for Building 6267, CHPRC Sample Processing Facility.
- Estimating Support Services
  - Completed the Close-Out meeting for the KPMG Estimating System Audit on December 8, 2014. There were no findings or observations. The final report will be sent to RL.
- **EVMS Compliance and Reporting**
  - o A draft of the Management Assessment (MA) PC&PI-2015-MA-15016 - *Assessment of the Effectiveness of the Identification, Management, and Closure of Project Risks*, was developed. This MA, which was initiated by CHPRC in response to recent criticism by the DOE IG of risk management at PFP, is being performed assess CHPRC’s risk management program and risk management execution for compliance with the requirements of the PRC, including DOE O 413.3A, Program and Project Management for the Acquisition of Capital Assets, and PRC-MP-MS-19361, CH2M HILL Plateau Remediation Company Project Execution Plan. The final results of the Management Assessment will be completed in January.
  - o Processed and incorporated 10 Baseline Change Requests (BCRs) into the Performance Measurement Baseline (PMB).
  - o A test environment has been completed for a central database/repository that will provide a coding structure for documenting each project’s earned value basis and methodology. This system will enhance the current capabilities of providing accurate earned value data. Completion of the database is projected in January/February.
- **Strategic Planning and Integration**
  - **Interface Management**
    - o Interfaces (Technical, Administrative and Regulatory):
      - Continue to investigate further issues surrounding MSA/WRPS proposed site layout for trailer/parking installations on or near CHPRC WIDS sites. DOE AMRP Federal Project Director has been consulted and supports no building on WIDS sites. That information was provided to the MSA Site Evaluation Team for consideration.
      - Facilitating agreement and contract mechanism for inter contractor use and reimbursement of HAMTC Union Leadership on CBA related business.
      - Facilitating MSA resource priority for 100K and 400 Area water line maintenance and repairs.
      - In discussions with MSA regarding 100K A9 fence repair/replacements to address DOE Operations Assessments (OA) indicating compliance concerns. Path forward is for DWF&RS to provide a new fence to fill gap left by D&D of previous facility.

- Issued letter, CHPRC-1404705, “Request for Mission Support Alliance Actions to address issues identified in EM-RL—CPRC-CENTPLAT-2014-0003, Required Respiratory Protection Not Worn During Welding Resulted in Exposure.”
- Continued working through MSA Interface Management and Hanford Fire Department on current and future needs for supporting PFP on the PremAire Breathing Air equipment. Additional equipment purchased in plans to ramp up and support a second crew starting the end of January and a third coming online in March.
- o Annual Forecast of Services:
  - Status of usage based services needs ongoing and communicated to MSA as appropriate.
  - Specific items in discussion include additional Crane & Rigging resources during the second half of the Fiscal Year.
- o Inter-Contractor Issue Resolution:
  - Attended weekly field interface and resource allocation meetings.
  - Participating in regular Interface Management leadership meetings with RL, MSA and WRPS.
  - Attended Contractor Interface Board (CIB) meeting hosted by WRPS.
  - Attended FY2015 Kick-Off meeting for the annual ISAP data call and document preparation.
- o Controlling and Service Agreements:
  - HNF-23474 Revision 2, ICD between CHPRC and JCI for Hazardous Energy Control - Revision in process
  - HNF-46148 Revision 3, ICD between CHPRC and MSA for Water System Services (In USQ/Engineering release) – Routing for approval.
  - HNF-40686 Revision 5, AIA between CHPRC, WRPS and MSA for the Integrated Biological Controls Program – Revision in process.
  - HNF-58413, AIA for the Centralized Consolidation/Recycling Center Acceptance of Waste and Other Recycling Services – signed and awaiting release.
  - TOC-AIA-OHC-00037, Rev 0, AIA for Waste Treatment Plant Operational Readiness – Issued.
  - Participating in development of a proposed Inter-Contractor Stop Work AIA. Provided comments to CHPRC Subject Matter Expert.
  - Participating in development of an ICD with WCH for ERDF Leachate transfers to CHPRC Liquid Treatment Facilities (ETF/LERF/200 West Pump & Treat). Development in progress.
  - Participating in the development of an AIA with WRPS for Removal of the Heat Exchanger at ETF. Document is in comment resolution.
- o J.3 Table:
  - Reviewed WRPS proposed update to J.3 32 RSS Services item regarding updating ANSI references. Still in review mode.
  - Reviewed MSA proposed update to J.3 30 Ecological Monitoring and Compliance relating specifically to the Migratory Bird Treaty Act. Comments provided to MSA Interface Management. Final resolution of wording still ongoing.
- o J.13/J.14 Tables:
  - Final review on Quarterly review of J.13/J.14 tables ongoing. Update will include acceptance of buildings 275W and 4707 which will allow cancellation of the existing AIAs.
  - Reached mutual agreement on WRPS proposal to transfer 244-AR Vault and 241-EW-151 CHPRC waste sites to WRPS to simplify intrusion mitigation efforts.
- o Internal Operations:
  - Revision of Interface Management PRC-PRO-MS-10472 is in progress.
  - Continue support of ETF/LERF/TEDF transition to WRPS, as requested.

- Continue efforts on work management improvement initiatives relative to other contractors performing work in CHPRC facilities (Co-effort with PTS).
- Investigating performance issues with the MSA Chlorinator Serviceman and support for the 100 and 400 area water systems operations and maintenance.

### **Information Management**

- o Software development of the Respiratory Protection Equipment Tracking automated system continues. Additional requirements have been developed and will be added.
- o Continued inventory of all OCWRM holdings located at the 3212 Building to locate approximately 1000 records that do not have specific box locations on the OCRWM Index. 77 percent of documents have been tied to a box location to date.
- o Provided IT, event logistics, and facilitation support to company manager meetings, EZAC, PZAC, and Leadership Impact Initiative training
- o Provided information clearance and release support for 100K, S&GRP, DWF&RS, SHS&Q and PTS documents.
- o Provided numerous IT support requests for cellular phone issues/questions, meeting set-up, network connections, and printing.
- o Processed 10,511 Electronic Records into IDMS.

### **Project Technical Services (PTS)**

#### **• Central Engineering**

- o Fire Protection Engineering
  - Issued the PFP Fire Hazards Analysis for final approval.
  - Completed the Annual Assessment of the Fire Hazards Analysis Key Assumptions for the Low Level Burial Grounds.
  - Completed the Ignitable/Reactive Waste Inspection for the Low Level Burial Ground and CWC.
  - Completed Fire Protection Assessments for 165-KE and 105-KW and submitted to MSA Fire Marshall's Office and the Integrated Evaluation Plan.
- o Engineering Services
  - Supported S&GRP design/calculation for contaminated drilling filtration system.
  - Supported 105KW Annex welding submittal reviews.
  - Supported review of STP submittals on the fabrication of ECRTS process equipment.
  - Provided STP Design Authority support for:
    - Fabrication of the Annex Demister Assembly.
    - Annex Ventilation
  - Supported S&GRP review of the Construction design for Uranium IX treatment.
- o Engineering Standards/Programs
  - Supported WESF Ventilation ASME AG-1 planning efforts.
  - Supported RL in the review of the Draft Report of the Hanford Site-Wide Probabilistic Seismic Hazard Analysis.
  - Drafted a change to the Design Change Notice (DCN) Process to provide more flexibility regarding incorporation of redlines into DCNs and drawings.
  - Supporting DWF&RS, STP in response to DNFSB Staff Questions on T Plant Seismic Analysis.
  - Supported T Plant pre-filter housing procurement and fabrication.

- **Procedures and Training**
  - Provided Writer Certification Training to all CHPRC procedure writers.
  - Upgraded Quality Assurance suite of procedures.
  - Procedures and Training Safety Management Programs presented to the ESRB as “green” programs.
  - Implemented new COA for computer based training.
  - Presented Respiratory Issuer Job and Task Analysis and Difficulty, Importance, and Frequency survey results to the site Training Center of Expertise.
  - Completed upgrade to Engineering Qualification Program.
- **Operations Program**
  - Coordinated with Mission Support Contractor corrective actions developed from the Hanford Site response to the water treatment plant chlorine alarm.
  - Work Management procedure suite changes have been made and submitted for core team review.
  - Commenced the annual Lock and Tag assessment.
  - Completed Hazardous Energy Control (R) occurrence report effectiveness review with a satisfactory conclusion.
- **Project Delivery**
  - S&GRP
    - Weather enclosure at 289T erected.
    - Commenced field bonding of UP1 transfer line.
    - Initiated planning for unload and install of IX skid at 200W Pump-and-Treat Facility, delivery scheduled for January 2015.
  - DWF&RS
    - Weld demo and procedure development completed on 189 Clearwell tank, tank repair currently schedule for January 2015.
    - Asphalt at exterior of 6267 WESF facility completed.
    - 105KE roof repairs on hold pending further roof evaluations and weather.
    - Roof repairs completed at WRAP and CWC facilities.
  - PFP
    - Door 107 work scope completed and Construction Completion Document issued.
- **KW Annex Construction**
  - Completed the installation of the in ground hydronic pipe between the building and chiller pad.
  - Completed shop fabrication and anti-microbial coating of the galvanized ductwork.
  - Completed 95% of the shop fabrication of the AG-1 stainless steel exhaust ductwork – 95% complete.
  - Completed the epoxy flooring in the low, intermediate and load out bays.
  - Completed the layout of mechanical (ME) and HVAC equipment.
  - Initiated installation of Electrical Equipment hangers in the high bay.

## Communications

- CHPRC Communications closed the year with the production of a video highlighting CHPRC accomplishments for the first quarter of FY2015, with distribution scheduled for January. CHPRC Communications also produced a video showcasing CHPRC’s Safety Legacy commitment of safety 24/7, featuring employees who visit local schools as part of the “After School Matters” program to teach children about safety and the career opportunities available to them at Hanford.
- Communications drafted and collated content for an intranet site to support field work supervisors and first line managers. The site went live in December and is part of a larger effort to train and equip those leaders with skills and tools help them overcome obstacles in their roles.

- Notable all employee messages delivered during December included the announcement of Stacy Charboneau named Richland Operations Manager, a follow up message regarding the Hanford Site weather-related closures and delay process, a message underscoring the importance of proper code of accounts recording on timekeeping records and required training as part of the COA list revision, and a message regarding the news release distributed highlighting Richland Operations' 2014 cleanup progress.
- CHPRC fielded a media request which resulted in a story in the *Tri-City Herald* regarding the Excellence in Hazardous Materials Management Award, given for CHPRC's demolition of a former laydown yard in 200 West. CHPRC also responded to media requests from the *Weapons Complex Monitor* regarding the status of a corrective action plan for the Department of Energy's Office of Inspector General audit of the Plutonium Finishing Plant, which resulted in coverage. *Rad Waste Solutions* October-December issue featured the employee engagement in choosing, training and using protective equipment to clean out and prepare for demolition 242-Z at the Plutonium Finishing Plant.
- Communications supported an RL tour of the Site with Congressman-Elect Dan Newhouse, with stops at the 200 West Pump-and-Treat Facility and the Plutonium Finishing Plant. Communications also coordinated distribution of public information materials for RCRA Class 3 for WESF Hot Cell. Public comment period runs from December 11, 2014 through February 12, with a public meeting planned for January 7, 2014.

## 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	0.1	0.1	0.2	0.0	0.0%	(0.1)	-22.2%
Internal Audit	0.0	0.0	0.1	0.0	0.0%	(0.0)	-173.9%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	13.8%
Communications	0.1	0.1	0.1	0.0	0.0%	(0.0)	-28.3%
Safety, Health, Security and Quality	1.0	1.0	0.8	(0.0)	-0.3%	0.2	20.0%
Environmental Program and Strategic Planning	0.3	0.3	0.3	0.0	0.0%	0.0	14.8%
Business Services	1.3	1.3	1.4	0.0	0.0%	(0.1)	-7.1%
Prime Contract and Project Integration	1.6	1.6	1.3	0.0	0.0%	0.3	16.5%
Project Technical Services	0.5	0.5	0.5	(0.0)	-2.0%	(0.0)	-3.4%
<b>Indirect WBS 000 Total</b>	<b>5.1</b>	<b>5.1</b>	<b>4.8</b>	<b>(0.0)</b>	<b>-0.3%</b>	<b>0.3</b>	<b>5.9%</b>

Numbers are rounded to the nearest \$0.1M.

#### Indirect WBS 000

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

Variance is within reporting thresholds.

##### CM Cost Performance: (+\$0.3M/+5.9%)

Variance is within reporting thresholds.

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

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)
Office of the President	0.4	0.4	0.5	0.0	0.0%	(0.2)	-41.3%	1.7
Internal Audit	0.1	0.1	0.2	0.0	0.0%	(0.1)	-62.4%	0.7
General Counsel	0.3	0.3	0.2	0.0	0.0%	0.1	20.9%	1.2
Communications	0.2	0.2	0.3	0.0	0.0%	(0.0)	-21.5%	1.0
Safety, Health, Security and Quality	3.1	3.1	2.5	(0.0)	-0.2%	0.6	18.1%	13.9
Environmental Program and Strategic Planning	1.0	1.0	1.0	0.0	0.0%	(0.0)	-0.1%	4.3
Business Services	4.1	4.1	4.4	0.0	0.0%	(0.3)	-6.1%	16.2
Prime Contract and Project Integration	5.1	5.1	4.1	0.0	0.0%	1.0	19.2%	23.0
Project Technical Services	1.6	1.6	1.8	(0.0)	-0.6%	(0.2)	-11.3%	7.3
<b>Indirect WBS 000 Total</b>	<b>15.9</b>	<b>15.8</b>	<b>15.0</b>	<b>(0.0)</b>	<b>-0.1%</b>	<b>0.9</b>	<b>5.4%</b>	<b>69.2</b>

Numbers are rounded to the nearest \$0.1M.

### Indirect WBS 000

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

Variance is within reporting thresholds.

**FYTD Cost Performance: (+\$0.9M/+5.4%)**

The favorable cost variance is primarily due to less than planned IRM Business System Improvements, B&O Home Office Cost estimate reductions, and staffing vacancies currently in process of being backfilled.

### Baseline Change Requests

BCR-000-15-001R0 – *Modification of Electronic Time Keeping Verification System Planning*

BCR-PRC-15-015R0 – *Undistributed Budget Adjustments December 2014*

BCRA-PRC-15-014R0 – *HPIC Updates December 2014*

