

# Monthly Performance Report

## December 2015

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

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



P.O. Box 1600  
Richland, Washington 99352

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Richland, Washington 99352

**APPROVED**

*By Ashley Jenkins at 12:39 pm, Jan 25, 2016*

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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 2015**  
CHPRC-2015-12, Revision 0

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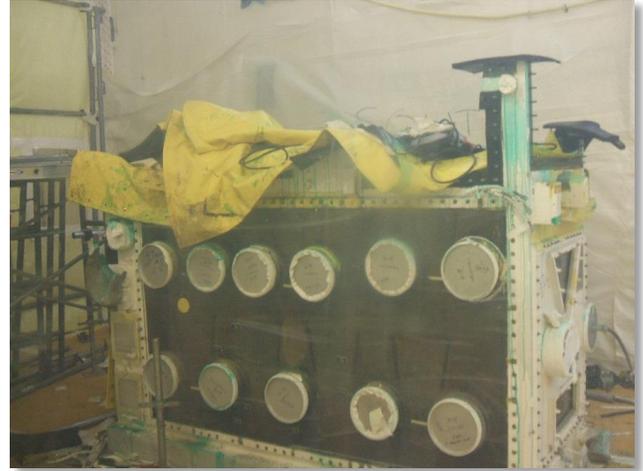
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## EXECUTIVE SUMMARY

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

- The Plutonium Finishing Plant (PFP) closure project continued canyon waste debris clean-up, packaging, and load-outs at 236-Z Plutonium Reclamation Facility (PRF). The project completed remediation of floor residue in the Tank Room at 242-Z, and continued duct level removal activities in the 234-5Z facility.
- The Waste and Fuels Management Project (W&FMP) continued progress on the Waste Encapsulation and Storage Facility (WESF) Stabilization and Ventilation Project. W&FMP workers completed the factory acceptance testing of the K3N heater at WESF, entered the WESF canyon to install a continuous air monitor, and received and anchored all construction trailers.
- The Soil and Groundwater Remediation Project (S&GRP) continued activities in support of well drilling in FY2016, including receiving ecological and cultural clearance letters for the installation of monitoring wells in the 100-FR-3 Operable Unit.
- The K Basin Operations and Plateau Remediation (KBO&PR) project completed the assembly of the instrumentation for the first sludge transport and storage container and removed sampling equipment from four engineered containers in the 100K West Basin in preparation for re-lidding. Crews excavated another ten feet on three additional waste sites as part of the 100K AB Waste Site Remediation.



**In December, crews removed the top and middle section of Glovebox HA-9A at PFP.**



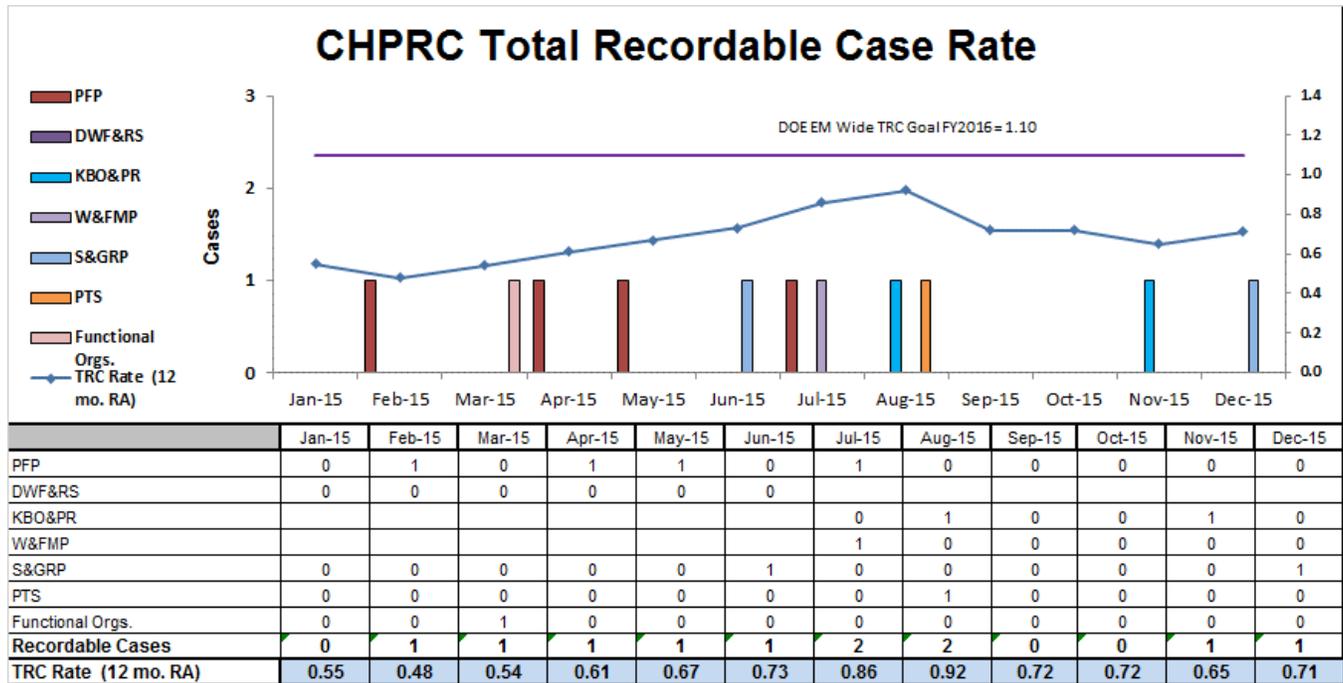
**100K AB Waste Site remediation.**

The December 2015 President's Zero Accident Council (PZAC) meeting was hosted by Safety, Health, Security & Quality.

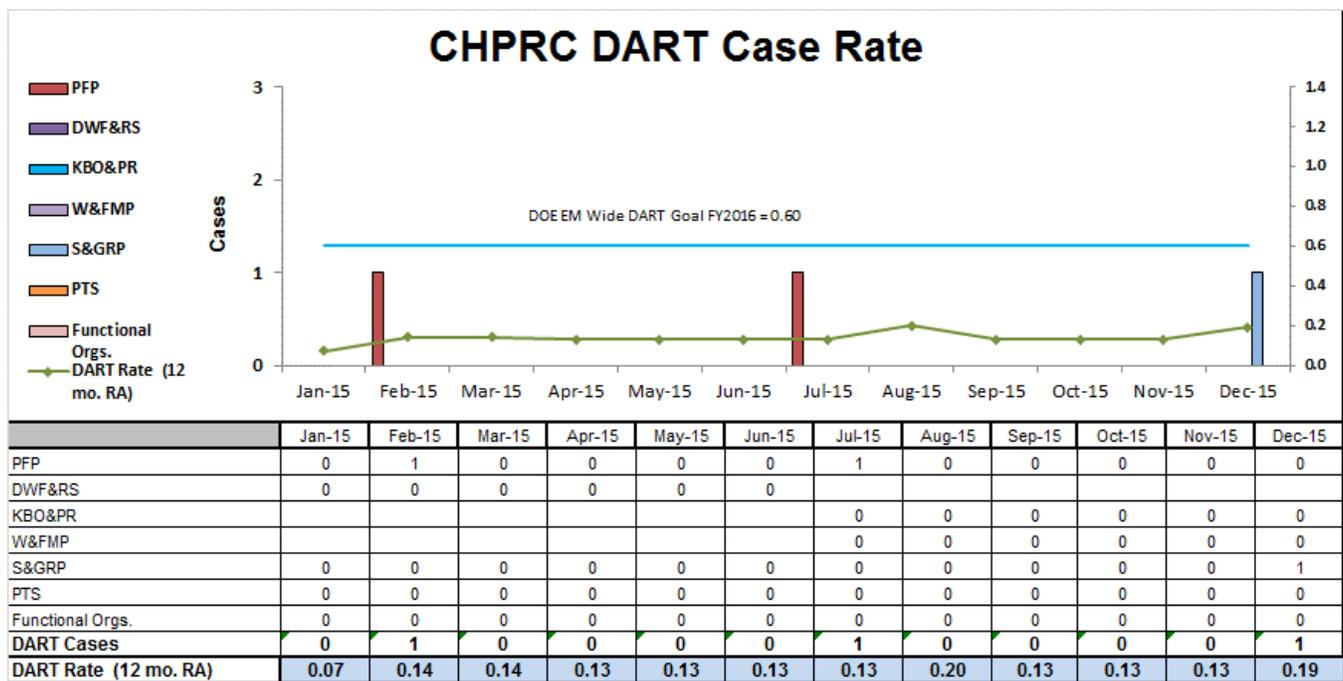
- The three main ideas for the meeting were:
  - o Winter Walking – Be Present and Focused When Walking
  - o Tires – Use the Right Ones for the Season
  - o Winter Driving Tips – Drive for Changing Road Conditions
- Four “*Thinking Target Zero*” (TTZ) bulletins were published in December to convey important occupational, safety, health, and environmental messages:
  - o Winter Driving
  - o Slips, trips, and falls in Winter
  - o Carbon Monoxide Safety
  - o How green is your ice melt
- December *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
  - o Four Lessons Learned: Avoiding Accidental Smoke Detector Activations; a broken weld was discovered on a Cotterman® ladder, load capacity 350 pounds (lbs.); an employee walking on a flat dock area caught their foot in a strap at the Y12 National Security Complex; and empty drum falls off truck during transport
  - o “What Would You Do?” Ethics Awareness messages
  - o Housekeeping: Seven Reasons Housekeeping Really Matters
  - o Headlight effectiveness regarding cloudy lenses
  - o Site early releases and work delays
  - o Work zone speed reduction
  - o Prescription safety eyewear
  - o What happens in a collision
  - o Ladder inspections
  - o Year-end dosimeter exchange
- The December Kudos Corner recognized individuals and teams who made a significant contribution to safety at work, home or play:
  - o A PFP worker stopped another person that only works there occasionally who had forgotten their personal nuclear accident dosimeter. The attention to detail, protocol, and concern for the safety of others, especially those not as familiar with the new entry requirements, was noticed.
  - o A KBO&PR millwright new to the work group demonstrated a questioning attitude regarding a portion of the monorail system in the 100K West Basin, which was then tagged out until it could be further evaluated to make sure it was working properly.
  - o Two workers safely removed a potential hazard due to high winds. A side rail from the back of a flatbed truck was leaning such that it could have blown into nearby buildings or people walking by. They placed the board so that the chances of it flying away were minimized.
  - o An employee for demonstrating safety 24/7 by clearing driveways and sidewalks in her neighborhood during the recent snow.

## TARGET ZERO PERFORMANCE

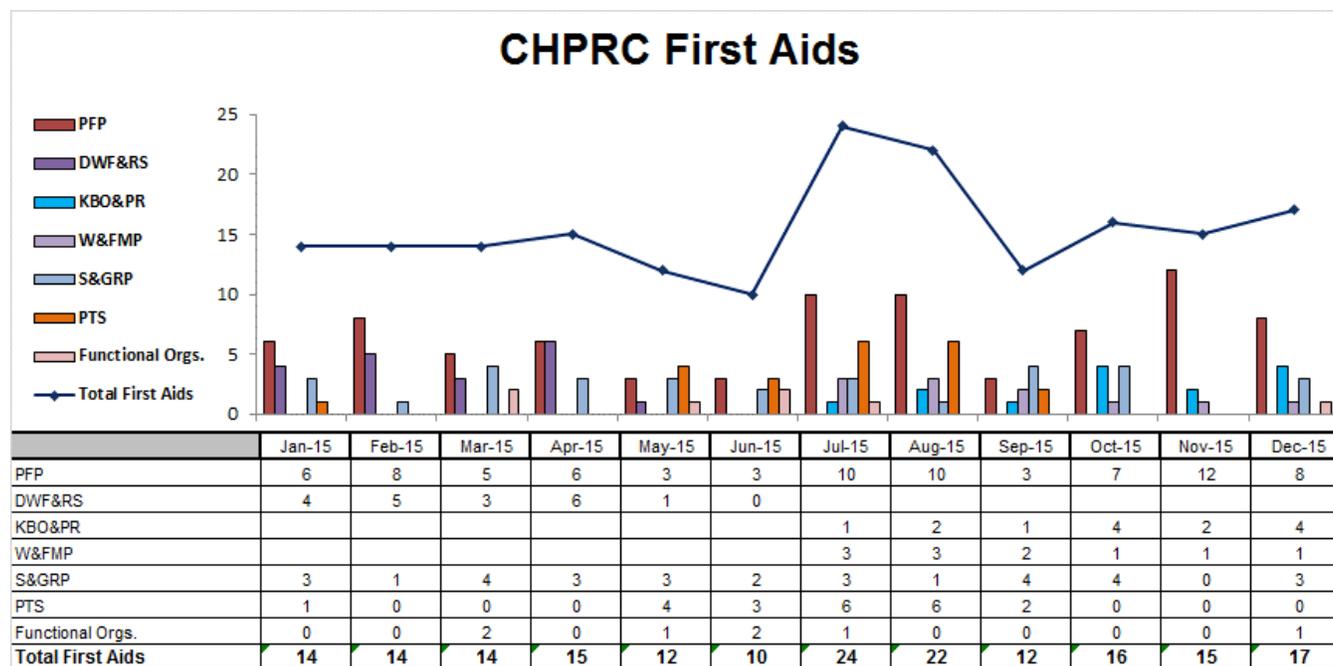
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.71 is based on a total of 11 Recordable injuries. There was one Recordable case for December. There are no cases currently being evaluated or investigated for potential recordability.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.19 is based upon a total of three Days Away cases. There was one DART case in December.



First Aid Case Summary: CHPRC reported 17 first aid cases in December; of these, eight cases required no treatment. There were no self-treated injuries. The contributors were nine sprains / strains / pains, five abrasions / contusions, and three miscellaneous (irritation, shock, etc.).

## KEY ACCOMPLISHMENTS

### Projects

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

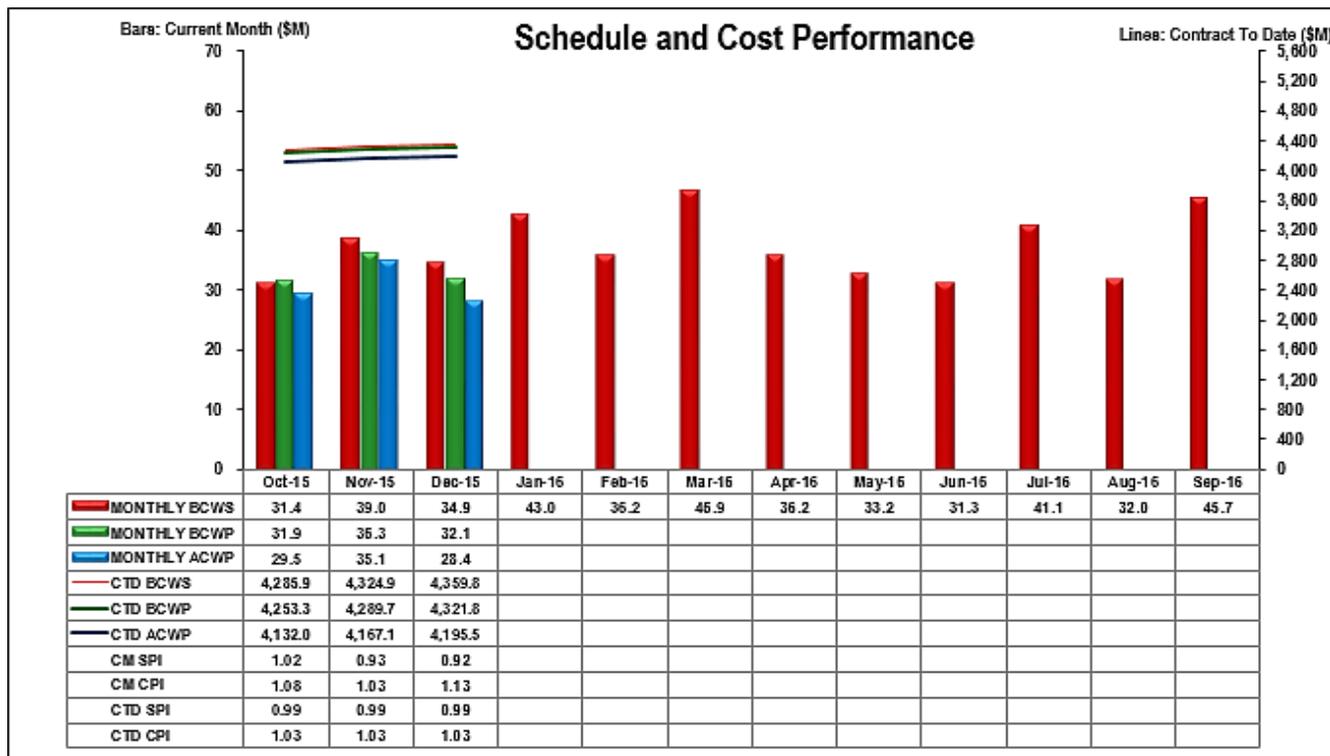
### Project Services and Support

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

## MAJOR ISSUES

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

## EARNED VALUE MANAGEMENT



	\$M						\$M					\$M		
	Current Period			Contract to Date			Contract to Date			Contract Period				
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance		BAC	EAC	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost				
RL-0011 - Nuclear Materials Stab & Disp PFP	9.4	7.8	7.4	(1.6)	0.4	891.4	858.8	864.7	(32.6)	(5.9)	969.8	970.6	(0.9)	
RL-0012 - SNF Stabilization & Disposition	5.2	5.5	4.6	0.3	0.9	533.5	534.1	546.5	0.6	(12.4)	717.2	726.2	(9.0)	
RL-0013 - Solid Waste Stab & Disposition	8.8	7.5	6.3	(1.3)	1.2	1006.8	1008.1	947.4	1.2	60.7	1,336.0	1,254.7	81.3	
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	9.3	8.4	7.7	(0.9)	0.7	1181.8	1172.8	1153.0	(9.1)	19.8	1,568.0	1,516.7	51.3	
RL-0040 - Nuc Fac D&D - Remainder	1.1	1.0	1.2	(0.1)	(0.1)	406.1	405.9	374.3	(0.2)	31.6	473.5	438.6	34.9	
RL-0041 - Nuc Fac D&D - RC Closure Project	0.9	1.8	1.1	0.9	0.7	319.5	321.5	292.7	2.0	28.8	399.9	369.5	30.4	
RL-0042 - Nuc Fac D&D - FFTF Project	0.1	0.2	0.1	0.0	0.1	20.5	20.6	16.8	0.0	3.8	26.7	22.8	3.9	
(Values are rounded to the nearest \$0.1M)	<b>Total</b>	<b>34.9</b>	<b>32.1</b>	<b>28.4</b>	<b>(2.8)</b>	<b>3.8</b>	<b>4,359.7</b>	<b>4,321.8</b>	<b>4,195.5</b>	<b>(37.9)</b>	<b>126.3</b>	<b>5,491.0</b>	<b>5,299.1</b>	<b>191.9</b>
(Values do not have UB breakout)														

### Performance Summary

CHPRC continues to track completion of contract scope within budget and is currently projecting a Variance at Completion of \$191.9 million with \$60.8 million of Management Reserve (MR) for a total positive variance of \$252.7 million. For December, the project was 7.9 percent behind schedule and 11.7 percent under planned cost. CTD, the project was 0.9 percent behind schedule and 2.9 percent under planned cost.

The current month unfavorable schedule variance is primarily due to RL-0011 PFP resources being reassigned to complete higher priority work (i.e. PRF D&D, Insitu Glovebox removal), resulting in fewer resources available to perform work as planned. The temporary stop work at PFP on high hazard work has also contributed to the schedule variance. The current month favorable cost variance is attributed to RL-0013 implementation of planned efficiencies such as resource sharing of multiple scopes of work.

## FUNDING ANALYSIS

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

PBS	Project	FY2016		Variance
		Projected Funding	Spending Forecast	
RL-0011	Nuclear Materials Stabilization and Disposition	116.2	100.4	15.8
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	46.2	52.8	(6.6)
RL-0012	15-D-401 Sludge Retrieval Project	68.1	33.0	35.1
RL-0013	Waste and Fuels Management Project	109.6	107.3	2.3
RL-0030	Soil, Groundwater and Vadose Zone Remediation	126.1	125.3	0.8
RL-0040	Nuclear Facility D&D, Remainder of Hanford	24.6	23.2	1.4
RL-0041	Nuclear Facility D&D, River Corridor	15.1	20.8	(5.7)
RL-0042	Fast Flux Test Facility Closure	3.3	1.8	1.5
<b>Total Base:</b>		<b>509.3</b>	<b>464.7</b>	<b>44.5</b>

### Funds/Variance Analysis

FY2016 expected funding did not change in December and remains at \$509.3 million. The Fiscal Year Spending Forecast (FYSF) increased this month in RL-0041 for increased costs anticipated for 100K Waste Site Area AB Part 2. CHPRC is working with RL for incremental funding to support this work.

## BASELINE CHANGE REQUESTS

In December 2015, CHPRC approved and implemented eighteen (18) BCRs impacting the Performance Measurement Baseline (PMB). Each change request is identified in the table below:

Change Request #	Title	Summary of Change
BCR-013-16-004R0	<i>Definitization of CO #277, Super 7A Trailer</i>	This BCR incorporates the Definitization of Change Order (CO) #277, Super 7A Trailer, as documented in Contract Modification (CM) 460.  This BCR increased the PMB by \$533K.
BCR-013-16-009R0	<i>CO #263, ERDF Leachate Transfer Pipeline Construction</i>	This BCR incorporates the scope associated with the increase to the Not to Exceed (NTE) value in CO #263, ERDF Leachate Transfer Pipeline Construction and Operations.  This BCR decreased the PMB by \$800K.
BCR-013-16-010R0	<i>WESF Stack Monitoring Planning Package to Detailed Work Package</i>	This BCR updates the planning package scope for the WESF Stack Monitoring System into detailed planning and deletes the work scope associated with procurement of a stack monitoring system that will is no longer required.  This BCR decreased the PMB by \$248K.
BCR-013-16-011R0	<i>Definitization of CO #274, CWC Box NDA Campaign</i>	This BCR incorporates the definitization of CO #274, CWC Box NDA Campaign, as documented in CM 463.  This BCR increased the PMB by \$239K.
BCR-013-16-012R0	<i>Environmental and Regulatory Enhancements</i>	This BCR incorporates the following scope into the PMB as a part of the Mod 445 CLIN 7 movement initiative: <ul style="list-style-type: none"> <li>• Benchmark RCRA inspection sheets and establish consistent format</li> <li>• Evaluate and issue procedure for an automated RCRA checklist and inspection system for the CWC</li> <li>• Perform an effectiveness review of completed actions and provide a letter report to RL</li> </ul> This BCR does not change the PMB value.
BCR-013-16-013R0	<i>Re-plan Ecology Agreed Order Tasks</i>	This BCR re-planned Ecology Agreed Order tasks due to changes in planning assumptions for activities related to box covers and roof repairs.  This BCR does not change the PMB value.
BCR-030-16-013R0	<i>Incorporate TPA M-016-193, Complete Remedial Design Investigation of SE Chromium Plume</i>	This BCR incorporates Tri-Party Agreement Milestone M-016-193 into the PMB schedule.  This BCR does not change the PMB value.
BCR-030-16-014R0	<i>CO #299, 200W P&amp;T Systems Membrane Bioreactor Cassette Additions</i>	This BCR incorporates the scope associated with the increase to the NTE Value for CO #299 as authorized in CM 442 and CM 446.  This BCR increased the PMB by \$1,444K.

Change Request #	Title	Summary of Change
BCR-030-16-015R0	<i>Definitization of CO #272, Build and Implement Portable Remediation Treatment</i>	This BCR incorporates the definitization of CO #272, Build and Implement Portable Remediation Treatment, as documented by CM 452.  This BCR increased the PMB by \$285K.
BCR-030-16-016R0	<i>Definitization of CO#292, 200 SW-2 RIFS Aerial Radiation Survey</i>	This BCR incorporates the definitization of CO #292, 200-SW-2 RIFS WP Aerial Radiation Survey, as documented by CM 455.  This BCR increased the PMB by \$161K.
BCR-030-16-017R0	<i>CO #266, 200-BP-5 OU Construction and O&amp;M of Transfer Pipeline</i>	This BCR incorporates the scope associated with the \$600K increase to the CO #266 NTE value authorized by CM 444, and the further increase of the NTE value of \$2M authorized by CM 458 for a total revised NTE value of \$4.6M.  This BCR increased the PMB by \$2,636K.
BCR-PRC-16-017R0	<i>200-CW-5 and 200-PW-136 RDRAWP Realized Risk</i>	This BCR incorporates the draws down of MR to support the completion of in-scope unplanned work to address the Draft A regulator comments and issue the Revision 0 RD/RAWP.  This BCR increased the PMB by \$120K.

The Allocated (Distributed) Budget increased by \$5,969K.

#### Undistributed Budget Activity

BCR Number	Title	Fiscal Year	UB
BCR-041-16-006R0	<i>PBS RL-041 Undistributed Budget Adjustments December 2015</i>	2015 - 2018	\$ 1,000K
BCR-PRC-16-018R0	<i>Undistributed Budget Adjustments December 2015</i>	2015 - 2018	\$ -3,528K

The Undistributed Budget decreased by \$2,528K for an overall increase to the Performance Measurement Baseline of \$3,441K during December.

#### Management Reserve Activity

BCR Number	Title	Fiscal Year	MR
PCR-PRC-16-017R0	<i>200-CW-5 and 200-PW-136 RDRAWP Realized Risk</i>	2015 - 2018	\$ -120K
BCR-013-16-010R0	<i>WESF Stack Monitoring Planning Package to Detailed Work Package</i>	2015 - 2018	\$ 248K

Overall, there was an increase of \$128K to Management Reserve during December.

### Fee Activity

BCR Number	Title	Fiscal Year	Fee
BCR-013-16-011R0	<i>Definitization of CO #274, CWC Box NDA Campaign</i>	2015 - 2018	\$20K
BCR-013-16-004R0	<i>Definitization of CO #277, Super 7A Trailer</i>	2015 - 2018	\$10K
BCR-030-16-015R0	<i>Definitization of CO #272, Build and Implement Portable Remediation Treatment</i>	2015 - 2018	\$22K
BCR-030-16-016R0	<i>Definitization of CO#292, 200 SW-2 RIFS Aerial Radiation Survey</i>	2015 - 2018	\$8K

Overall, there was an increase of \$61K 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 2015 Summary of Changes

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
<i>November 2015 Estimate</i>									
PMB	3,391,477	391,653	471,323	443,495	425,797	363,849	2,096,117	5,487,593	5,487,593
MR	0	0	0	21,582	13,984	25,107	60,673	60,673	60,673
Fee	155,504	14,325	14,501	21,293	9,463	17,822	77,405	232,909	232,909
<b>Total</b>	<b>3,546,981</b>	<b>405,978</b>	<b>485,824</b>	<b>486,370</b>	<b>449,245</b>	<b>406,778</b>	<b>2,234,194</b>	<b>5,781,175</b>	<b>5,781,175</b>
<i>December 2015 Change</i>									
<b>PMB</b>									
<i>Change to PMB</i>	0	0	0	7,445	-2,528	-1,476	3,441	3,441	3,441
<b>MR</b>									
<i>Change to MR</i>	0	0	0	129	0	0	129	129	129
<b>Fee</b>									
<i>Change to Fee</i>	0	0	0	61	0	0	61	61	61
<b>Total Change</b>	0	0	0	7,635	-2,528	-1,476	3,631	3,631	3,631
<i>December 2015 Estimate</i>									
PMB	3,391,477	391,653	471,323	450,940	423,269	362,373	2,099,558	5,491,035	5,491,035
MR	0	0	0	21,711	13,984	25,107	60,802	60,802	60,802
Fee	155,504	14,325	14,501	21,354	9,463	17,822	77,465	232,969	232,969
<b>Total</b>	<b>3,546,981</b>	<b>405,978</b>	<b>485,824</b>	<b>494,005</b>	<b>446,717</b>	<b>405,302</b>	<b>2,237,825</b>	<b>5,784,806</b>	<b>5,784,806</b>

*Changes to/Utilization of Management Reserve in December 2015*

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
<i>November 2015 MR Totals</i>								
RL-0011	0	0	0	7,293	3,800	0	11,093	11,093
RL-0012	0	0	0	3,395	5,000	3,897	12,292	12,292
RL-0013	0	0	0	2,751	800	6,824	10,375	10,375
RL-0030	0	0	0	2,897	484	6,546	9,927	9,927
RL-0040	0	0	0	1,000	1,000	740	2,740	2,740
RL-0041	0	0	0	4,096	2,800	7,000	13,896	13,896
RL-0042	0	0	0	150	100	100	350	350
<i>Total</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>21,582</i>	<i>13,984</i>	<i>25,107</i>	<i>60,673</i>	<i>60,673</i>
<i>December 2015 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	249	0	0	249	249
RL-0030	0	0	0	-120	0	0	-120	-120
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
<i>Total</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>129</i>	<i>0</i>	<i>0</i>	<i>129</i>	<i>129</i>
<i>December 2015 MR Totals</i>								
RL-0011	0	0	0	7,293	3,800	0	11,093	11,093
RL-0012	0	0	0	3,395	5,000	3,897	12,292	12,292
RL-0013	0	0	0	2,999	800	6,824	10,624	10,624
RL-0030	0	0	0	2,777	484	6,546	9,807	9,807
RL-0040	0	0	0	1,000	1,000	740	2,740	2,740
RL-0041	0	0	0	4,096	2,800	7,000	13,896	13,896
RL-0042	0	0	0	150	100	100	350	350
<i>Total</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>21,710</i>	<i>13,984</i>	<i>25,107</i>	<i>60,802</i>	<i>60,802</i>

## SELF-PERFORMED WORK

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

Contract-to-Date Actual Awards & Mods				Projection to FY18	
10/1/2008 -12/31/2015				Planned Subcontracting:	\$2,564,285,972
Reporting Category				Contract-to-date awards:	\$2,303,549,474
				Bal remaining to award:	\$260,736,498
	\$ Value	%	Goal %	Goal award\$	Bal to Goal
SB	\$1,205,484,789	52.33%	49.3%	\$1,264,192,984	\$58,708,195
SDB	\$206,372,158	8.96%	8.2%	\$210,271,450	\$3,899,291
SWOB	\$239,839,197	10.41%	7.5%	\$192,321,448	-\$47,517,749
HUB	\$45,549,517	1.98%	2.2%	\$56,414,291	\$10,864,774
VOSB	\$152,703,016	6.63%	3.5%	\$89,750,009	-\$62,953,007
SDVO	\$79,390,628	3.45%	1.3%	\$33,335,718	-\$46,054,910
NAB	\$36,585,761	1.59%	N/A	PRC clause H.20 small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
Large	\$608,781,362	26.43%	N/A		
GOVT	\$2,307,744	0.10%	N/A		
GOVT CONT	\$482,866,522	20.96%	N/A		
EDUCATION	\$102,592	0.00%	N/A	CHPRC Contract Value:	\$5,732,255,464
NONPROFIT_	\$3,648,098	0.16%	N/A	17% rqmt:	\$974,483,429
FOREIGN	\$358,366	0.02%	N/A	SB actual:	\$1,205,484,789
<b>Total</b>	<b>\$2,303,549,474</b>	<b>100.00%</b>	<b>N/A</b>	Bal to rqmt	-\$231,001,360

Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.3 billion in goods and services with over 52 percent going to small businesses. Nearly all subcontracting goals have been exceeded.
2. Approximately 93 percent of the total dollars arise from service and staffing contracts and contract amendments with five percent of the remaining expenditures arising from P-Card purchases and the balance in purchase orders for materials and equipment.
3. Data is summarized by business categories (Women Owned Minority Business Enterprise codes) in accordance with socioeconomic reporting requirements. Small business categories overlap and should not be added together.

## GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
<b>CONTRACT</b>			
J.12/C.2.3.6	PBS-0013, Transuranic Waste Certification	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office.	Ongoing

# Section A

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



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

December 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

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

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
Glovebox/ Hood Removed or Dispositioned in Place	-	228 gloveboxes/hoods
KPP Rooms/Areas Ready for Demo	-	60 rooms/areas
Asbestos/ACM Removed	445	23,801 feet
Process Vacuum Piping Dispositioned	0	3,907 feet
Process Transfer Line Dispositioned	16	1,407 feet
Pencil Tank Units Removed (Shipped)	-	196 pencil tank units
Buildings Ready for Demo	-	43 structures
Buildings Demolished or Removed	-	43 structures
Non-radioactive Waste Shipped	-	72 m <sup>3</sup>
TRU/TRU-M Shipped	15 m <sup>3</sup>	2,032 m <sup>3</sup>
LLW/MLLW Shipped	34 m <sup>3</sup>	6,870 m <sup>3</sup>

The removal of plutonium-contaminated process equipment continued with a particular focus on removing gloveboxes, associated piping, and ductwork. The total number of gloveboxes removed to date is at 98 percent complete.

- Continued with the Independent Verification Review (IVR) for HNF-15500 “PFP. Deactivation and Decommissioning Documented Safety Analysis” Revision 12 and HNF-15502 “PFP Deactivation and Decommissioning Technical Safety Requirements” Revision 12. Expected implementation January 12, 2016.
- Documented Safety Analysis (DSA) Revision 12 refresher briefing was conducted the end of December with full implementation still on schedule for mid-January.
- The Safety Basis Revision 13 DSA and Technical Safety Requirement (TSR) were transmitted to RL on December 14, 2015.
- Continued 236-Z PRF Canyon waste debris clean-up, packaging, and load-outs.
- Removed 445 feet of asbestos.
- Removed 249 feet of E-4 ducting from 234-5Z Duct Level.
- Removed 16 feet of process transfer lines.
- Completed size reduction of middle level of 234-5Z Glovebox HA-9A.

## EMS Objectives and Target Status

Objective #	Objective	Targets	Actions	Due Date	Status
16-EMS-PFP-OB1-T1	Minimize emissions resulting from demolition of 234-5Z, 236-Z, 242-Z, and 291-Z.	Inspect 234-5Z, 236-Z, 242-Z, and 291-Z for the presence of asbestos containing materials (ACM) and produce a report identifying ACM requiring removal or abatement and methods for protecting remaining ACM from resulting in visible emissions.	1. Issue report documenting thorough inspection of 236-Z	1/31/16	TBD
			2. Issue report documenting thorough inspection of 242-Z	03/31/16	TBD
			3. Issue report documenting thorough inspection of 234-5Z	06/30/16	TBD
			4. Issue report documenting thorough inspection of 291-Z	09/30/16	TBD
16-EMS-PFP-OB1-T2	Minimize emissions resulting from demolition of 234-5Z, 236-Z, 242-Z, and 291-Z.	Develop an air dispersion model that will guide the D4 processes to keep radiological emissions as low as reasonably achievable below the regulatory limit of 10 mrem/year.	5. Issue air dispersion modeling report	12/31/15	95%

## TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	8	81	<ul style="list-style-type: none"> <li>• 12/2/2015 - Employee stumbled on ice and fell injuring shoulders and neck. Employee was taken to HPMC and returned to work with no restriction. (23881)</li> <li>• 12/2/2015 - Employee hit his right knee on protruding scaffold tubing. Employee was taken to HPMC and returned to work with no restriction. (23885)</li> <li>• 12/3/2015 - Employee slipped on patch of ice causing contusion to knee. Employee was taken to HPMC and returned to work with no restriction. (23887)</li> <li>• 12/7/2015 - Employee was tightening bolts on a motor when they</li> </ul>

	Current Month	Rolling 12 Month	Comment
			<p>experienced lower back pain. Employee was taken to HPMC and returned to work with no restriction. (23893)</p> <ul style="list-style-type: none"> <li>12/9/2015 - Employee reported having metallic taste in mouth. Employee was taken to HPMC and returned to work with no restriction. (23895)</li> <li>12/11/2015 - Employee was dismantling a harness and developed hand and finger pain. Employee was taken to HPMC and returned to work with no restriction. (23899)</li> <li>12/12/2015 - While climbing a ladder, employee bumped their knee causing an abrasion. Employee was taken to HPMC and returned to work with no restriction. (23896)</li> <li>12/17/2015 - Employee slipped and fell on snow, causing an abrasion to their knee. Employee was taken to HPMC and returned to work with no restriction. (23902)</li> </ul>
<b>Near Misses</b>	1	5	<ul style="list-style-type: none"> <li>12/10/2015 - Contamination found on PremAire equipment (vortex cooler) outside of a posted radiological area (Hanford Fire Department)</li> </ul>

## KEY ACCOMPLISHMENTS

### 11.02 Maintain Safe & Compliant PFP

- Continued with the Independent Verification Review (IVR) for HNF-15500 “PFP Deactivation and Decommissioning Documented Safety Analysis” Revision 12 and HNF-15502 “PFP Deactivation and Decommissioning Technical Safety Requirements” Revision 12. Expected implementation January 12, 2016.
- DSA Revision 12 refresher briefing was conducted the end of December with full implementation still on schedule for mid-January.
- The Safety Basis Revision 13 DSA and TSR were transmitted to RL on December 14, 2015.

### 11.05 Disposition PFP Facility

#### 242-Z

- Isolated and air gapped remaining tanks.
- Disposed of W-2, W-3, W-4, W-5, W-12, W-13, & W-15 piping.
- Installed the trollies to relocate the tanks.
- Relocated tanks W-3, W-4, & W-5 for demolition preps.
- Completed 30 percent of the temporary power needed for demolition support.

#### 234-5Z

- RMA Line:
  - Completed size reduction on middle level of Glovebox HA-9A.
- Duct Level:
  - Removed 445 feet of asbestos.
  - Removed 249 feet of E-4 ducting from 234-5Z Duct Level.
  - Removed 16 feet of process transfer lines.

**236-Z PRF**

- Canyon:
  - o Continued Canyon waste debris clean-up, packaging, and load-outs in preparation for grouting the canyon floor.

## 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 DSA/TSR Revision 12 was approved by RL on May 4, 2015. Continued with the Independent Validation Review (IRV) for HNF-15500 “PFP Deactivation and Decommissioning Documented Safety Analysis” Revision 12 and HNF-15502 “PFP Deactivation and Decommissioning Technical Safety Requirements” Revision 12.

Received the requested approval letter from RL (16-NSD-0002\_RL) authorizing the implementation date for DSA Revision 12 to be moved forward to no later than 30 days after removal of Glovebox HA-9A Plexiglas panels, as opposed to 30 days after glovebox size reduction.

Refresher briefings were conducted the end of December, and full implementation is scheduled for January 12.

**Issue:**

**Removal of hazardous material will be coordinated using a regulatory compliant graded approach, to avoid cost and schedule impacts associated with complete removal of materials such as brass, electrical components, and lead based paint residues.**

**Corrective Action:**

Coordinate with Maintenance and Waste Integration to establish mass balance calculations for various hazardous materials, demonstrating how much hazardous material may remain with building rubble and still meet Environmental Restoration Disposal Facility (ERDF) Waste Acceptance Criteria (WAC).

**Status:**

CHPRC-02603, Evaluation of Chemical Content in Rubble from the Demolition of 236-Z Facility, December 2015 was issued on December 29, 2015. This document demonstrates that a majority of materials can remain with building rubble and meet ERDF WAC. Prohibited conditions that require remediation prior to demolition are also identified.

The project characterization team is working with D4 team and Waste Integration to detail items that are to be addressed prior to demolition or best reserved for action during the pre-demolition phase of the project.

With respect to further Project/EVMS reporting, this issue is considered resolved.

**Issue:**

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

**Corrective Action:**

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

**Status:**

- Previously packaged J-Pan waste was unpackaged and placed back in the PRF Canyon.
- Waste packaging instructions for J-Pan wastes were developed and waste is in process of being packaged per the waste packaging instructions.
- PFP is performing 100 percent visual inspections of waste drums that contain PRF canyon waste prior to shipment.
- Waste Shipment of PRF Canyon Waste to Central Waste Complex (CWC) has commenced with shipment of Non-J Pan wastes; J Pan wastes are being held at PFP pending Laboratory Analysis Results which are expected in late February.

**Issue:**

**PremAire Vortex coolers found with contamination at the Hanford Fire Department (HFD)**

**Corrective Action:**

Retrieved all vortex coolers and associated Mine Safety Appliance PremAire equipment, surveys completed of HFD - no contamination found at facility. Retrieved three coolers from Mine Safety Appliance sales representative's vehicle in Kennewick – fixed contamination below 458.1 Clearance thresholds identified on two of three tubes, no contamination identified at residence, vehicle, or storage unit.

In cooperation with the Radiological Assistance Program, performed surveys of facilities in Ohio and Pennsylvania, where an additional eight coolers were sent by the Mine Safety Appliance sales representative – no contamination found on eight coolers or in facilities where they were handled.

**Status:**

Revised clearance survey plan for equipment, performed extent of condition for all clearance survey plans, root cause evaluation on going.

## RISK MANAGEMENT STATUS

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

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

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

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																								
		Month	Trend																									
<b>RL-0011/WBS-011.OA</b>																												
<b>Explanation of major changes to the project monthly stoplight chart:</b>																												
No major changes to the monthly stoplight chart in the month of <b>December</b> .																												
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)																												
No realized risks identified for RL-0011 in the month of <b>December</b> .																												
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																												
<b>Lifecycle Risk Triggers</b> (Risk could be realized at any point of the project)																												
PFP-092-02: Final Facility Characterization Identifies Unexpected Hold-up	Unexpected or late discovery of radiological (Pu) or chemical (Asbestos) holdup requiring added facility deactivation. <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$780K, 11 days	<span style="color: yellow; font-size: 2em;">●</span>	<span style="color: black; font-size: 2em;">↔</span>	<p><b>Risk Trigger:</b> Will continue throughout project lifecycle until Demolition activities commence.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 80%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Utilize opportunities when RCT's are available to perform intrusive radiological characterization surveys or ACM sampling as contingent or overtime work.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Incorporate higher than expected bounding parameters in the PNNL Air Dispersion model supporting open-air demolition. Risk reduction is achieved if subsequent model results support the higher than expected residual levels.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Develop SAP for steam lines in 291-Z fanhouse to confirm current TSI labelling. There is likelihood that steam lines were presumptively labelled and may not require abatement.</td> <td style="text-align: center;">3/10/16</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Complete Gamma Imaging surveys to identify prevailing hot spots and enable shorter "strategic" final decontamination events.</td> <td style="text-align: center;">1/28/16</td> <td style="text-align: center;">25</td> </tr> <tr> <td>Devise new multiple sensor NDA characterization plans that allow for improved quantification of residual MAR while deactivation work is ongoing.</td> <td style="text-align: center;">1/28/16</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Devise new decontamination/in-situ size reduction approaches to gain confidence that when complete higher than expected residual MAR will not be encountered.</td> <td style="text-align: center;">1/28/16</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Complete 234-5Z Duct Level inspection to identify piping with TSI dropping through to the first floor ceiling void. This results in early identification of any added TSI abatement activity.</td> <td style="text-align: center;">2/18/16</td> <td style="text-align: center;">75</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b>                      A listing of radiological characterization opportunities that align with Field Schedule activities have been posted on a shared directory accessible to all project Superintendents and Field Work Supervisors. This has proven effective in providing an "early warning" of a need for potential added deactivation work. Bounding estimates of residual MAR incorporated into the air dispersion model are holding. PRF Canyon Floor NDA measurements were completed in December, and results indicate grouting can proceed without further decontamination. Grouting will now occur in January 2016. Thereafter, ongoing mitigation action regarding final decontamination and characterization of the PRF gallery Gloveboxes, canyon walls, and strongbacks are planned for culmination as indicated. The SAP for TSI 291-Z is complete; however, execution is not planned until March to allow for completion of higher priority asbestos inspection and sampling activities in 234-5Z in the near term.                      234-5Z Duct Level inspections have identified the need to abate/remove an additional 3600 LF of Asbestos Thermal System Insulation (TSI). This added work can be completed through pipe removal in lieu of more labor intensive abatement activity, and can therefore be completed by existing insulator crew strength assigned and planned through May 2016. In this regard the work is incorporated into the ETC. The worst case probability and impact scenario, which could extend crew strength beyond May 2016 is not incorporated into the ETC. Mitigation action delays do not result in alternative course of actions at this time.</p>	Mitigation action(s)	FC Date	%	Utilize opportunities when RCT's are available to perform intrusive radiological characterization surveys or ACM sampling as contingent or overtime work.	Complete	100	Incorporate higher than expected bounding parameters in the PNNL Air Dispersion model supporting open-air demolition. Risk reduction is achieved if subsequent model results support the higher than expected residual levels.	Complete	100	Develop SAP for steam lines in 291-Z fanhouse to confirm current TSI labelling. There is likelihood that steam lines were presumptively labelled and may not require abatement.	3/10/16	75	Complete Gamma Imaging surveys to identify prevailing hot spots and enable shorter "strategic" final decontamination events.	1/28/16	25	Devise new multiple sensor NDA characterization plans that allow for improved quantification of residual MAR while deactivation work is ongoing.	1/28/16	50	Devise new decontamination/in-situ size reduction approaches to gain confidence that when complete higher than expected residual MAR will not be encountered.	1/28/16	50	Complete 234-5Z Duct Level inspection to identify piping with TSI dropping through to the first floor ceiling void. This results in early identification of any added TSI abatement activity.	2/18/16	75
Mitigation action(s)	FC Date	%																										
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																					
		Month	Trend																						
<b>RL-0011/WBS-011.OA</b>																									
<b>FY2016 Risk Triggers (Risk could be realized in FY2016)</b>																									
PFP-DEMO-02: Air Modeling Increases Equipment Removal/Decontamination for Demo	Air Dispersion identified additional MAR reduction higher than planned or RL directs constrains from Revision 12 SER, resulting in additional decontamination/fixatives and equipment removal prior to initiating open-air demolition resulting in schedule delays. <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$0, 16 days  *Cost increase will result in cost per day impacts from crews, and hotel load.			<b>Risk Trigger:</b> 07/06/2015																					
				<table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Work with the CHPRC environmental to ensure that an understanding of equipment, components, and residual material criterion are understood and bounded for air modeling.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop SOW to allow PNNL to update Air Dispersion model base on engineering controls to sequester MAR.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Deliver bounding estimates of residual holdup and current planned demolition sequence durations to PNNL to isolate any period where demolition progress may need to be slowed.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Identify opportunities where demolition operations could be accelerated to recover any schedule delays.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td><u>Brief regulatory stakeholders on air model results</u></td> <td>1/28/16</td> <td>50</td> </tr> <tr> <td>Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.</td> <td>2/18/16</td> <td>50</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Work with the CHPRC environmental to ensure that an understanding of equipment, components, and residual material criterion are understood and bounded for air modeling.	Complete	100	Develop SOW to allow PNNL to update Air Dispersion model base on engineering controls to sequester MAR.	Complete	100	Deliver bounding estimates of residual holdup and current planned demolition sequence durations to PNNL to isolate any period where demolition progress may need to be slowed.	Complete	100	Identify opportunities where demolition operations could be accelerated to recover any schedule delays.	Complete	100	<u>Brief regulatory stakeholders on air model results</u>	1/28/16	50	Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.	2/18/16	50
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<b>Mitigation Assessment:</b> In the month of December PNNL issued Revision 1 to the Air Dispersion Model document for review and comment. The dispersion model results confirm that PRF Canyon demolition alone poses the greatest challenge to radiological controls at the demolition perimeter. While formal document issue incorporating project comments is now expected in February 2016, the technical content is not expected to change. From a risk management perspective, the best mitigation is enabled by aligning planned demolition operations to durations that by model results prove to minimize disturbance of MAR such that DAC and contamination control can be safely managed within the demolition perimeter. Through planned slowing or acceleration of demolition sequences, further source term reduction through added high hazard decontamination activity can be avoided. Mitigation action delays do not result in alternative course of actions at this time.																									
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>																									
<b>FY2016 Risk Triggers (Risk could be realized in FY2016)</b>																									
PFP-PRF-22: OPP: NDA Process Allows for Section Results to be used	Improved NDA process allows for disposition of Gallery Gloveboxes into waste containers by using section data rather than summation of entire glovebox, resulting in schedule efficiencies. <b>Risk Handling Strategy:</b> Exploit  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$0, 60 days *Cost savings will result in cost per day from crews, and hotel load.			<b>Risk Trigger:</b> 10/05/2015																					
				<table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify activities necessary to implement in the FES.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Complete FES activities (last FES activity PRF-GGB-0120).</td> <td>05/11/16</td> <td>0</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Identify activities necessary to implement in the FES.	Complete	100	Complete FES activities (last FES activity PRF-GGB-0120).	05/11/16	0												
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<b>Mitigation Assessment:</b> No changes in the month of December. No foreseeable impacts in the near future. Opportunity will continue to be tracked and monitored throughout the Gallery Glovebox subproject lifecycle. No alternative course of actions needed at this time.																									
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>																									
No unassigned risks identified in the month of December.																									

## 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	9.4	7.8	7.4	(1.6)	-17.1%	0.4	4.8%

Numbers are rounded to the nearest \$0.1 million.

#### CM Schedule Variance: (-\$1.6M/-17.1%)

The current month unfavorable schedule variance is due to the continued delay in Rough Decon and Floor Sweeps of the PRF Canyon Floor debris resulting from a chemical reaction of “J” Pan waste, and a PFP Project safety pause associated with a radiological event related to the PremAire breathing air equipment. In addition, resources assigned to the 234-5Z duct level have been temporarily reassigned to complete higher priority work (i.e. PRF D&D, Insitu Glovebox removal), resulting in fewer resources available to perform work as planned. Also contributing to the negative variance is the behind schedule progress on discrete D&D work scope (apportioned), including: reprioritization of work teams to support higher priority work (i.e. PRF D&D and Insitu Glovebox removal) has resulted in schedule delays for: grouting of 234-5Z trenches and tunnels, balance of -5 process vacuum and process support equipment and demo prep for the ancillary facilities. This is partially offset by working historical 242-Z Control Room BCWS and recognized efficiencies therewith (not having to size reduce the tanks prior to demolition but rather by stabilizing them and leaving them in place for the demolition campaign and by utilizing a manlift rather than building scaffolding for each tank), and historical BCWS work activities on in-situ size reduction activities associated with the 234-5Z HA-9A in-situ size reduction efforts.

#### CM Cost Variance: (+\$0.4M/+4.8%)

The current month favorable 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	891.4	858.8	864.7	(32.6)	-3.7%	(5.9)	-0.7%	969.8	970.6	-0.9

Numbers are rounded to the nearest \$0.1 million

#### CTD Schedule Variance (-\$32.6M/-3.7%)

The Schedule Variance is within reporting thresholds.

#### CTD Cost Variance (-\$5.9M/-0.7%)

The Cost Variance is within reporting thresholds.

**Variance at Completion (-\$0.9M/-0.1%)**

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	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
RL-0011	\$116.2	\$100.4	\$15.8

Numbers are rounded to the nearest \$0.1 million

**Funds/Variance Analysis**

FY2016 expected funding for RL-0011 remains at \$116.2 million. The FYSF for December increased slightly from \$99.8 million to \$100.4 million.

**Critical Path Schedule**

Following adjustments to the PRF Canyon characterization schedule, the new PFP Critical Schedule Path flows through the 234-5Z Duct level E4 ducting and filter box removal, then to the final focused decontamination throughout 234-5Z. This leads into 234-5Z Cold & Dark and Ready for Demo, allowing demolition of 234-5Z and attached facilities to commence. Once complete, the final step is stabilization of the PFP site leading to completion of the final Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*.

**Baseline Change Requests**

None currently identified.

## MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PFP Facility Transition and Selection Disposition Activities	09/30/16		2/2/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, and safety pause associated with a radiological event caused the Tri-Party Agreement milestone projected completion date to slip an additional month for the forecast date in the November report. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed it is anticipated that efficiencies will be recognized to bring the schedule into alignment with a completion date of September 30, 2016. However, this Tri-Party Agreement completion is currently 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)



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

December 2015  
CHPRC-2015-12, 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, supporting the ECRTS Project work by supporting Annex construction In-Basin Construction activities and continued debris dose rating and relocation activities in 105KW Basin. The Operations team worked several monthly and quarterly routines during the period.
- RL has completed their initial review of the Revision 2 Preliminary Documented Safety Analysis (PDSA) and provided comments for resolution. Development of the KW Basin integrated DSA, which combines the ECRTS PDSA and the KW Basin FSAR into a single safety basis document continued.
- The ECRTS Project Procurement currently has eighteen procurement packages fully developed with fabrication in progress, seven procurement packages have been completed and one package remaining to be developed.
- Continued testing activities at the MASF and prepared for the MASF Preoperational Acceptance Testing (MPAT).
- MPAT specifications continue to progress through Joint Test Group (JTG) review/approval
- Annex Construction continued working remaining punch list items and acceptance testing.
- Establishment of STP as a Capital Asset Project (CAP) continued. The Independent Cost Estimate/External Independent Review (ICE/EIR) team provided their draft report identifying preliminary Findings for initiation of responses.

## EMS OBJECTIVES AND TARGET STATUS

None at this time.

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Dart Injuries	0	0	N/A
Recordable Injuries	0	1	N/A
First Aids	4	19	<ul style="list-style-type: none"> <li>• 12/2/2015 - Employee was getting into a truck that had ice and snow on running board slipped but was able to catch self with right arm. Later neck, back and shoulders began to ache. Body part affected: Neck, back and shoulder (23884)</li> <li>• 12/2/2015 - Employee assisting in shoveling snow when low back began to ache. Body part affected: Back (23883)</li> <li>• 12/3/2015 - Employee was removing ice and snow from a tarp on an ERDF container and due to bending and pushing developed back pain. Body part affected: Low back (23891)</li> <li>• 12/7/2015 - Employee attempted to step over a barricade chain when caught foot causing a fall. Body part affected: Arm (23889)</li> </ul>

## KEY ACCOMPLISHMENTS

- ECRTS Process Equipment Procurement:
  - o Buy Back Set #2; Safety Significant (SS) Transfer System Components - Testing of the TLSB is complete.
  - o Procurement Set #9; SS STSC Instrumentation & Assembly – Sludge Transportation System Cask new handrails were fit tested at MASF on the Sludge Transfer System (STS) Trailer.
  - o Procurement Set #17; STSC Contamination Drapes and STS Cask IP-2s - The CHPRC Plastic Shop has completed fabrication of three sets of lower cask liners with accessory sleeves and three upper cask covers with 8" diameter Ports. These items were delivered to MASF and were staged for use during MPAT.
- MASF:
  - o The MASF Truck Scale was calibrated for MPAT.
- KW Annex Construction completed contractor performance testing on the fire alarm system: all inputs/outputs were successfully tested. Horns/strobes were successfully tested.
- RL has completed their initial review of the Revision 2 PDSA and provided comments for resolution. Development of the KW Basin integrated DSA, which combines the ECRTS PDSA and the KW Basin FSAR into a single safety basis document continued.
- Received ICE/EIR draft Findings/Major Findings and initiated responses.
- 105 KW Basin Re-Lidding Construction completed:
  - o Mobilization of crew and tools into the Basin.
  - o Installation of temporary guardrail system around all six Environmental Containers (EC).
  - o Determ/isolation of level sensors and cameras.

- o Camera removal on three of the six ECs.
- o Removed cameras.
- o Removed all Installed Equipment Test (IET) collar assemblies
- 189K Water Treatment Facility clearwell tank has been placed back into service.
- 100K Operations completed:
  - o Change-out of IXM 4 following trouble-shooting and repair of 32-ton crane.
  - o Water injection into Sludge Container System SCS-CON-230, -250, and -260.
  - o Re-lamping of KW Basin and 105KW Admin areas.
  - o Shipment of ERDF container.

## MAJOR ISSUES

None currently identified.

## RISK MANAGEMENT STATUS

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

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																	
		Month	Trend																		
<b>RL-0012/WBS-012</b>																					
<b>Explanation of major changes to the project monthly stoplight chart:</b>																					
No major changes to the monthly stoplight chart in the month of December. It is anticipated that additional changes will be made once RL-0012 receives final EIR report.																					
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																					
STP-134-A: Contract Close-Out, Balance of CAT, & Subcontractor Performance - Annex Construction	Contract closeout administrative cost, scope, and schedule are greater than anticipated extending the project closeout process beyond the planned work scope period requiring additional support and resources to assist in the contract closeout process as a result of late change requests, post contract REA's and change requests resulting, arbitration, post contract claims or legal proceedings. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Low (10% to 25%) <b>Worst Case Impacts:</b> \$6.5 million, 28 days			<b>Risk Event:</b> Change orders to limit eventual claims at the end of the job. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="text-align: center;">Risk recovery action(s)</th> <th style="text-align: center;">Risk Date</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Issued Subcontractor Status Request Matrix</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">05/08/12</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Develop estimate on the "To Go Costs"</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Document changes into Phase I or Phase II completion buckets</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Incurred Costs have been submitted by Contractor – CHPRC is reviewing.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> <b>Recovery Action Assessment:</b> All Construction punch list items have been completed and all CAT Testing was completed in December 2016. A CAT defined punch list has been prepared and they are being actively worked to resolution. Several punch list items will have to be deferred until the ECRTS equipment is installed and the entire system can be tested. The Fire System ATP has been completed as well with defined punch list items identified. CHPRC is still awaiting final subcontractors certified claim response. This information was requested by CHPRC in our letter dated November 11, 2015. It was not received and requested in the updated letter dated December 3, 2015. Subsequent correspondence from CHPRC has resulted in additional cost data being provided for review and analysis by Cost Price staff in December. Reviews are in progress and response from CHPRC anticipated on or before January 21, 2016. The slip to the incurred cost review does not result in any alternate actions at this time. Contract closeout is anticipated no sooner than February 29, 2016.  All recovery actions are complete. This risk will no longer be reported on; however, it will continue to be monitored by the project and closed once contract closeout is complete.	Risk recovery action(s)	Risk Date	FC Date	%	Issued Subcontractor Status Request Matrix	05/08/12	Complete	100	Develop estimate on the "To Go Costs"	Complete	100	Document changes into Phase I or Phase II completion buckets	Complete	100	Incurred Costs have been submitted by Contractor – CHPRC is reviewing.	Complete	100
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<b>RL-0012/WBS-012</b>																		
STP-123-T: Design Maturity - T-Plant	<p>The final Nitrogen System design is pending FHA update. The construction specification is currently in development. In addition, changes resulting from the PDSA impact the design. There is additional risk with bidder interpretation of the facility ECRs. They do not clearly provide the entire scope of the contractor's work and clarifying bid document details are required.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Very Likely (&gt;90%) <b>Worst Case Impacts:</b> \$200K, 96 days</p>	●	↑	<p><b>Risk Event:</b> The risk is being realized based on constructability reviews of the FMPs. The impacts associated with this are the additional cost and resources associated with correcting design errors and providing constructability aids, conducting material take offs, resulting in a lower cost underrun for performing the original design. Schedule impacts eminent due to spec and ECR quality.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Incorporate PTS Comments on Construction Spec.</td> <td rowspan="3">03/03/15</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Complete PTS Construction Review w/Drawings and Specifications</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Incorporate Comments and Revise T-Plant Design Documents for the Construction SOW</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> T Plant design documents have been issued via ECR-15-000336, based on the current design under review by RL. The design documents have been given to the contractor for bidding purposes, even though the construction specification, HNF-8764 Revision 2, states that the installation is on hold, pending RL's approval of the MDSA (Revision 11). <b>Expected approval date is March 17, 2016.</b> If the MDSA is not approved as submitted, there is a potential for the design to change.</p> <p>The procurement effort is still underway based on a new path forward and de-scoping of a portion of the work. Cell 9L will not be cleaned and or used for STSC storage, which alleviates the necessity to install the levelling rack, containment, and leak detection. ECR-15-001576 (redlined version of ECR-15-000640) has been <b>released and has been provided in Addendum 3 of Contract Req. 275085 for the contractors to bid on.</b> The project is targeting an award date of January 14, 2016.</p> <p>In addition, the schedule activities have been sequenced such that installation will occur following the RL review and approval period of the MDSA. In the event we receive approval earlier, the installation of the nitrogen system becomes an opportunity to accelerate schedule and finish early. If the review/approval cycle is delayed, there could be an impact to the contractor, resulting in schedule delays and change orders.</p> <p>No additional alternative course of actions needed at this time. All indications, based on discussions with RL, are that Revision 11 of the MDSA will be approved.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Incorporate PTS Comments on Construction Spec.	03/03/15	Complete	100	Complete PTS Construction Review w/Drawings and Specifications	Complete	100	Incorporate Comments and Revise T-Plant Design Documents for the Construction SOW	Complete	100
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<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																		
No critical risks identified in the month of <b>December</b> .																		
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)																		
<b>Lifecycle Risk Triggers</b> (Risk could be realized at any point of the project)																		
STP-114: Aging Building Systems/Components Problems Impact Operations & S&M Activities	<p>Problems with aging building systems/ components (e.g. ventilation systems, water distribution system, CAM's, instrument air system, fire alarm system, and electrical system, etc.) result in inoperability or requires unscheduled maintenance/ outages, impacting planned operations or on-going surveillance and maintenance activities. These impacts result in cost impacts, and schedule delays.</p> <p><b>Risk Handling Strategy:</b> Control</p> <p><b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$1 million, 44 days</p>	●	↔	<p><b>Risk Trigger:</b> Routine S&amp;M activities identify problems with aging building systems/ components. This risk will continue throughout project lifecycle until sludge is removed from 105KW Basin.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform critical system reliability assessments; maintenance practices; procure critical spares, and maintain existing redundancies.</td> <td>On-Going</td> <td>N/A</td> </tr> <tr> <td>Continue with baseline plan for corrective and preventative maintenance on systems, structures and components.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No changes in the month of <b>December</b>. Operations continues to maintain the facilities in an operational status with no foreseeable impacts in the near future, and no alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	Perform critical system reliability assessments; maintenance practices; procure critical spares, and maintain existing redundancies.	On-Going	N/A	Continue with baseline plan for corrective and preventative maintenance on systems, structures and components.	On-Going	N/A					
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<b>FY2016 Risk Triggers</b> (Risk could be realized in FY2016)																		

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<b>RL-0012/WBS-012</b>																			
STP-093-T: Operational Resources Limitations for Construction Support - T-Plant Modifications	<p>During installation the T-Plant modifications and equipment installation activities, which are currently planned in the FES, compete for the same operational resources (e.g., NCO's, HPT's, Shift Managers, RA, RM, Work Planners). In addition, emergent resource limitations also emerge (e.g., training, sick leave, vacation, short/long term) causing equipment installation delays.</p> <p><b>Risk Handling Strategy:</b> Control</p> <p><b>Probability:</b> Very Likely (&gt;90%)  <b>Worst Case Impacts:</b> \$512K, 32 days</p>	●	↔	<p><b>Risk Trigger:</b> Activities planned in the FES compete for the same operational resources threatening the T-Plant project</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Post for additional operation resources.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Train newly added staff.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Utilize limited OT due to project priorities, and the large number of staff required to support recovery actions.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b>                      No changes in the month of December.                      Additional operational resources have been hired at T Plant to support the construction work. The Construction team has hired an additional planner to support work package development, enhanced work planning, and Hazard Review Board presentations. Additional resources will need to be hired in the event the project experiences attrition or other limitations. In addition, overtime will be utilized to recovery any schedule risk.</p>	Mitigation action(s)	FC Date	%	Post for additional operation resources.	Complete	100	Train newly added staff.	Complete	100	Utilize limited OT due to project priorities, and the large number of staff required to support recovery actions.	On-Going	N/A			
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STP-103-M: MASF Pre-Operational Acceptance Testing (MPAT)	<p>The ECRTS equipment does not operate as expected, requiring increased engineering &amp; MASF Testing Staff Support. This will require design modifications of production hardware and changes to control system software. These modifications will negatively impact downstream testing, construction, readiness and ECRTS Operations.</p> <p><b>Risk Handling Strategy:</b> Control</p> <p><b>Probability:</b> Medium (26% to 74%)  <b>Worst Case Impacts:</b> \$1 million, 60 days</p>	●	↔	<p><b>Risk Trigger:</b> Unexpected resignation of critical testing personnel or equipment does not operate as expected.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Establish a testing strategy document to communicate planned testing activities and optimize scope of MPAT.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Evaluate and implement "Risk Reduction Testing Activities" in an effort to minimize the risk of discovering anomalous equipment operation during MPAT.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Establish factory acceptance testing criteria that will provide reasonable confidence that minimal operational surprises will be realized during subsequent MPAT at MASF.</td> <td>1/21/16</td> <td>98</td> </tr> <tr> <td>Consider incentives for key project personnel to ensure their availability during this critical acceptance-testing phase of the project.</td> <td>1/28/16</td> <td>95</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b>                      All risk mitigation activities are on track to complete late January. Personnel are actively managing critical procurements required for MPAT and FAT criteria is 98% established. Several actions have been taken to secure commitment from staff. Will push to finalize prior to 1/31/16.</p>	Mitigation action(s)	FC Date	%	Establish a testing strategy document to communicate planned testing activities and optimize scope of MPAT.	Complete	100	Evaluate and implement "Risk Reduction Testing Activities" in an effort to minimize the risk of discovering anomalous equipment operation during MPAT.	Complete	100	Establish factory acceptance testing criteria that will provide reasonable confidence that minimal operational surprises will be realized during subsequent MPAT at MASF.	1/21/16	98	Consider incentives for key project personnel to ensure their availability during this critical acceptance-testing phase of the project.	1/28/16	95
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<b>RL-0012/WBS-012</b>																															
STP-111-B: Contractor/ Subcontractor Performance – ECRS Annex/ In-Basin Equipment Installation	The General Contractor and their supporting subcontractors have historically performed poorly and will be challenged on this project by compliance with project and contract flow down requirements (e.g. quality, nuclear standards, site safety requirements, subcontract management to ensure contract requirements are met, NRTL compliance, suspect counterfeit, Buy-American contract clause, Project Controls requirements, development of Construction Acceptance Testing (CAT), timely processing of submittals compliance with all the subcontract flow down requirements) as well as deployment and maintenance of key staff that are essential to safe, cost effective and on-time project delivery. This risk is further compounded by sequestration and decrement funding. <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Very Likely (>90%) <b>Worst Case Impacts:</b> \$792K, 96 days	●	↔	<p><b>Risk Trigger:</b> The risk is that the General Contractor will not be able to comply with all contract requirements (e.g. for quality, nuclear standards, site safety requirements, subcontract management, NRTL compliance, suspect counterfeit, Buy-American contract clause, Project Controls requirements, adequately develop the Construction Acceptance Testing (CAT), timely processing of submittals and compliance with all subcontract and contract flow down requirements) and be challenged to deploy or maintain essential project staff.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Establish weekly CHPRC and General Conditions Contractor interface meetings (e.g., Safety Meeting, Field Safety Walk-down, QA, POD/POW, Schedule and Performance Review) to track performance.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Implement extensive oversight</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Contractor pre-evaluation completed and shortlisted 3-potential bidders.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Shortlisted bidders evaluated and placed on Site ESL.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Acquisition planning document written to allow additional work to be added to successful bidder-if their performance is acceptable.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Provide additional training.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Increased schedule duration for the project effort.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Evaluate alternative / overlapping shifts.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> Mitigation actions are currently under development for this risk. CHPRC risk ownership was transferred in the month of October. The action to complete the risk register review was delayed until <b>January</b>. Once reviews are complete the risk mitigation actions will be finalized, and forecasted finish dates applied.</p>	Mitigation action(s)	FC Date	%	Establish weekly CHPRC and General Conditions Contractor interface meetings (e.g., Safety Meeting, Field Safety Walk-down, QA, POD/POW, Schedule and Performance Review) to track performance.	Ongoing	N/A	Implement extensive oversight	Ongoing	N/A	Contractor pre-evaluation completed and shortlisted 3-potential bidders.	Ongoing	N/A	Shortlisted bidders evaluated and placed on Site ESL.	Ongoing	N/A	Acquisition planning document written to allow additional work to be added to successful bidder-if their performance is acceptable.	Ongoing	N/A	Provide additional training.	Ongoing	N/A	Increased schedule duration for the project effort.	Ongoing	N/A	Evaluate alternative / overlapping shifts.	Ongoing	N/A
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STP-121-B: As-Found Conditions - ECRS Annex/In-Basin Equip.	Historically, As found, unknown-unknowns, and emergent conditions have impacted construction execution and contractor performance. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Very Likely (>90%) <b>Worst Case Impacts:</b> \$1.3 million, 48 days	●	↔	<p><b>Risk Trigger Metric:</b> As-Found or emergent conditions impact construction execution and contractor performance.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> <b>No changes in the month of December.</b> The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A																					
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STP-121-T: As-Found Conditions - Equipment Install - T-Plant	Historically, As found, unknown-unknowns, and emergent conditions have impacted construction execution and contractor performance. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Very Likely (>90%) <b>Worst Case Impacts:</b> \$1.3 million, 48 days	●	↔	<p><b>Risk Trigger Metric:</b> As-Found or emergent conditions impact construction execution and contractor performance.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> <b>No changes in the month of December.</b> The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time.</p> <p>In the event as-found conditions are encountered the project make schedule adjustments as necessary, and engage engineering, Operations, and SME resources, as appropriate, to assist in mitigating negative impacts to cost and schedule. In addition, if asbestos-containing material (ACM) is discovered the project will ensure a subset of construction craft workers are trained appropriately to handle discovery of ACM. No alternative course of actions necessary at this time.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A																					
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STP-123-B: Design Maturity - ECRTS Annex/In-Basin Equip.	Finalization of design media for the ECRTS equipment installation will result in changes to both cost and schedule. There is also a compounding risk that design changes (e.g. auxiliary ventilations system modifications and nitrogen bottle rack pad, Albi Clad removal, additional hangers for purge pipe, truck pad) will result from the incorporation of PDSA/FHA comments and are more extensive than planned. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Very Likely (>90%) <b>Worst Case Impacts:</b> \$13 million, 96 days	●	↔	<p><b>Risk Trigger Metric:</b> Changes to the final design for the ECRTS equipment installation impacts project cost and schedule.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No changes in the month of December. The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A												
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None identified at this time.	N/A	N/A																				
<b>FY2018 Risk Triggers (Risk could be realized in FY2018)</b>																						
STP-018-O: STP Operational Upset or Spill - During 1st STSC	An operational upset or spill results in a work shutdown at K Basins, resulting in schedule delays. <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$6 million, 90 days *Cost increase will result in hotel load cost per day.	●	↔	<p><b>Risk Trigger:</b> Will commence in FY2018 and continue throughout project lifecycle until sludge is removed from 105KW Basin.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct testing and training at MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.</td> <td>04/10/17</td> <td>25</td> </tr> <tr> <td>Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.</td> <td>10/02/17</td> <td>0</td> </tr> <tr> <td>Utilize overtime as needed, or if required, to respond to events</td> <td>As needed</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> Forecasted mitigation dates are consistent with overall STP critical path schedule. The 5-month slip to conduct rigorous startup following system installation results in no alternative course of actions at this time. Training and procedure development continues with no emerging issues. OTJ for the operators on MASF equipment will start in FY2017.</p>	Mitigation action(s)	FC Date	%	Conduct testing and training at MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.	04/10/17	25	Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	10/02/17	0	Utilize overtime as needed, or if required, to respond to events	As needed	N/A						
Mitigation action(s)	FC Date	%																				
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Utilize overtime as needed, or if required, to respond to events	As needed	N/A																				
STP-073-C: Processing Efficiency - Retrieval & Shipping, During 1st STSC	The realized processing efficiency associated with sludge retrieval and shipping operations does not match baseline plan. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Low (10% to 25%) <b>Worst Case Impacts:</b> \$0K, 8 days  *Cost increase will result in cost per day impacts from crews, and hotel load.	●	↔	<p><b>Risk Trigger:</b> Beginning with Operations Campaign – March 16, 2018, per current Field Execution Schedule (FES)</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Review lessons learned from NLOP sludge retrieval.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Incorporate operations personnel recommendations into the ECRTS Process System &amp; STSC design.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Evaluate alternatives to reduce the total STSC's by optimization of sludge loading.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Test the Design on simulated sludge and test the production hardware to validate operability prior to installation in the 105 KW Basin.</td> <td>08/02/16</td> <td>50</td> </tr> <tr> <td>Fully train operations personnel on the system at MASF prior to commencing operations in the basin including providing adequate time to achieve reasonable operational proficiency.</td> <td>04/10/17</td> <td>25</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> In the month of December, risk ownership changed. New risk owner updated the forecasted mitigation dates to be consistent with overall STP critical path schedule. Operations personnel were given training on the process system equipment and will continue to participate in training activities through production system installation at 100K. No foreseeable impacts in the near future and no alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	Review lessons learned from NLOP sludge retrieval.	Complete	100	Incorporate operations personnel recommendations into the ECRTS Process System & STSC design.	Complete	100	Evaluate alternatives to reduce the total STSC's by optimization of sludge loading.	Complete	100	Test the Design on simulated sludge and test the production hardware to validate operability prior to installation in the 105 KW Basin.	08/02/16	50	Fully train operations personnel on the system at MASF prior to commencing operations in the basin including providing adequate time to achieve reasonable operational proficiency.	04/10/17	25
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Fully train operations personnel on the system at MASF prior to commencing operations in the basin including providing adequate time to achieve reasonable operational proficiency.	04/10/17	25																				
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>																						
No unassigned risks identified in the month of December.																						

## 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	5.5	4.6	0.3	5.3%	0.9	16.3%

Numbers are rounded to the nearest \$0.1 million

#### CM Schedule Performance (+\$0.3M/+5.3%)

The variance is within reporting thresholds.

#### CM Cost Performance (+\$0.9M/+16.3%)

The positive cost variance is the result of correcting a prior month over accrual of the Annex Construction Contract; this correction resulted in a positive correction and therefore a positive cost variance.

## Contract-to-Date

### (\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	533.5	534.1	546.5	0.6	0.1%	(12.4)	-2.3%	717.2	726.2	(9.0)

Numbers are rounded to the nearest \$0.1 million

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

The variance is within reporting thresholds.

#### CTD Cost Performance (-\$12.4M/-2.3%)

The variance is within reporting thresholds.

#### Variance at Completion (-\$9.0M/-1.3%)

The variance is within reporting thresholds.

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

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

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
Expense	46.2	52.8	(6.6)
Line Item	68.1	33.0	35.1
RL-0012	114.3	85.8	28.5

Numbers are rounded to the nearest \$0.1 million.

### Funds/Variance Analysis

FY2016 projected funding for RL-0012 is \$114.3 million. The projected overrun in expense funding is driven by the decision to move fee and T Plant Modifications out of the Line Item. A funding re-rack is being worked with RL and is expected to be complete in January. The Line Item funding for the STP CAP project has been assigned for FY2016 and FY2017 work scope, thus causing a positive variance in FY2016.

### Critical Path Schedule

The critical path flows through the installation of process equipment, 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* (milestone is outside contract period in FY2019).

### Baseline Change Requests

None this month.

## 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.	09/30/2018		09/15/2018	The forecast date of September 15, 2018.

### SELF-PERFORMED WORK

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

### GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

# Section C

## Solid Waste Stabilization and Disposition (RL-0013)



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

December 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

W&FMP maintained facilities in a safe and compliant condition. Overall, the project is delivering planned efficiencies, but continues to be impacted by emerging work and realized risks. The WESF Stabilization and Ventilation Project (W-130) completed factory acceptance test of K3N heater; performed Canyon entry to install Continuous Air Monitor (CAM); and all construction trailers have been delivered. In addition, Canister Storage Building completed status report on cleaning of storage tubes MO3/M04. Transuranic (TRU) Repackaging Project shipped a fiberglass-reinforced plywood (FRP) waste box 2345Z1018 (32.6 m3) from Central Waste Complex (CWC) to Permafrix Northwest (PFNW) for processing.

## EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
16-EMS-WFM-OB1-T1	Improve container labeling.	Reconcile data between SWITS and the Operating Record for 750 containers at CWC, and update container labeling for those containers (if needed).	9/30/16	59%
16-EMS-WFM-OB1-T2	Improve consistency in RCRA inspections between WFM facilities.	Establish consistent format, language, approvals, and corrective action tracking standards for WFM RCRA inspections.	9/30/16	0%
16-EMS-WFM-OB1-T3	Improve consistency in recordkeeping for RCRA inspections at CWC.	Evaluate and issue procedure for an automated RCRA Checklist and inspection system for CWC.	9/30/16	0%

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	2*	N/A *1 Recordable case, PTS in support of RL-0013.
First Aid Cases	1	26*	<ul style="list-style-type: none"> <li>12/14/15 - Employee was ascending stairs, caught left toe on stair, which prompted the trip/fall. During the fall, employee's body twisted and strained lower back. (23897)</li> </ul> *8 First Aid Cases, PTS in support of RL-0013.
Near Misses	0	1	N/A

## KEY ACCOMPLISHMENTS

### 13.01 Project Management

- o Formally transmitted the Part B Application document to RL on December 15, 2015.

### 13.02 Capsule Storage & Disposition

- o Performed/Completed:
  - 2016 Inner Capsule Movement Testing (ICMT) ahead of schedule.
  - 25 Preventive Maintenance (PM) work packages.
- a. **Capsule Extended Storage Project:**
  - Transmitted draft study to CHPRC for review.
  - M-91 Alternative Study:
    - Continued defining the wastes that require new treatment capabilities.
    - Provided RL representatives a tour of the burial grounds that contain the retrievably stored waste.
- b. **WESF Stabilization and Ventilation Project (W-130):**
  - Completed removal of the survey booth and berm.
  - Delivered and anchored all construction trailers.
  - Completed factory acceptance test of K3N heater.
  - Performed Canyon entry to install CAM.

### 13.03 Canister Storage Building (CSB)

- o Performed/Completed:
  - Status report on cleaning of storage tubes MO3/M04.
  - 27 PM packages.

### 13.06 TRU Repackaging

- o Shipped one fiberglass-reinforced plywood (FRP) to PFNW for repack – 32.6 m3.
- o Received three waste boxes from PFNW and two waste boxes from PermaFix East to MWT31.
- o Transuranic mixed (TRUM) waste completed and returned fiscal year to date - 170.5 m3.
- o Awarded Super 7A Trailer contract. Delivery date expected in 180 days.

### 13.07 WRAP

- o Initiated annual Fire Hazard Analysis Key Assumption Assessment.
- o Shipped four non-radiological hazardous waste poly containers off-site.
- o Received one special nuclear material (SNM) drum from PFP to 2404-WC Material Balance Area (MBA).
- o Surveillances/PMs:
  - 120 Surveillances.
  - 12 PM packages.

### 13.08 T Plant

- o Completed Annual Chemical Information Tracking System (CITS) Inventory.
- o Surveillances/PMs:
  - 434 Surveillances.
  - 31 PM packages.

### 13.09 CWC and Low Level Burial Grounds (LLBG)

- o Performed/Completed:
  - Annual CWC/LBG Ignitable/Reactive Waste Inspection.
  - Emergency light repairs in 2402-W.

#### CWC Container Watch List:

- o Currently there are 0 priority-1 and 0 priority-2 waste drums in storage.

#### Environmental Enhancement:

- o Data reconciled/containers labeled: 443 drums (Target: 750 drums)

- o Surveillances/PMs:
    - 19 PM packages.
    - 310 Surveillances.
  - o Shipments Received:
    - Eight standard waste boxes (SWB) from PFP to CWC.
- 13.12 Integrated Disposal Facility**
- o Completed monthly inspections.
- 13.16 Off Site Spent Nuclear Fuel Disposition**
- o Maintained coordination for offsite Spent Nuclear Fuel Disposition.
- 13.21 Mixed Waste Disposal Trenches (MWT)**
- o Completed:
    - 128 Surveillances.

## MAJOR ISSUES

### Issue:

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

### Corrective Action:

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

### Status:

Continuing to use the best demonstrated available technology to provide adequate configuration and minimize the potential for contamination spread during the long-term storage (i.e., protecting boxes with tarps or protective shoring and over packing drums). RL has provided additional authorization for \$17 million of TRU Repackaging, which helps to address this issue, and containers are being shipped to commercial repackaging facility. Additional repackaging scope was incorporated into the contract and performance measurement baseline in October 2015.

### Issue:

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

### Corrective Action:

RL and WDOH were notified of the situation. Options to rectify the situation were evaluated. WDOH prefers an engineering evaluation by Pacific Northwest National Laboratory (PNNL) to justify use of the higher flow rates. This will also provide defensibility for past data. Following successful completion of the engineering evaluation, RL will submit a Notice of Concern (NOC) revision to modify the license to reflect the wider range of stack flow rates.

### Status:

RL provided direction to proceed with the PNNL statistical analysis of the CSB stack flow data as well as data from other similar stacks. A contract was awarded to PNNL on July 29, 2015. The first deliverable was received September 28, 2015; the preliminary review is complete. PNNL supplied preliminary information providing a basis for an expanded flow range. A meeting with RL and WDOH was held October 8, 2015 to present the first deliverable from PNNL. Following the meeting, PNNL cleared the presentation for release, and the cleared copies were provided to WDOH on October 22, 2015. WDOH

provided positive feedback on the PNNL presentation but wants one of six original tests to be re-performed but at lower flow rates to validate the PNNL statistical analysis, which used test results from similar stacks for comparison. The facility Environmental Compliance Officer is looking into feasibility of performing this testing during quarterly stack flow testing; however, RL contractual approval and funding are required. PNNL was given direction to proceed with preparation of their formal report December 1, 2015, with an anticipated completion date of February 26, 2016.

**Issue:**

CSB storage tubes M03 and M04 were discovered to have rust-like substances under the tube covers and on the tube plugs. M03 was significantly coated, where M04 only displayed a trace amount. The rust-like substance was not radiological contaminated. Vapor sampling detected no abnormal readings. This condition was discovered during the conduct of the primary MBA Custodian inventory during a representative observation of storage tubes.

**Corrective Action:**

Two separate samples determined the presence of rust and other benign substances. The MBA inventory was completed. A work package to inspect, clean and borescope the interior of the tube has been prepared. Engineering/corrosion SMEs from the Central Group were contacted to support the inspection and evaluation.

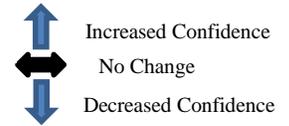
**Status:**

Status report on cleaning of storage tubes M03/M04 was completed December 14, 2015. Final assessment is that the pitting is superficial and does not compromise the structural integrity or radiological shielding capability of any MCO tube assembly component. Follow-on actions are to re-inspect tube M03 for changing conditions after 90-days and final report will be issued after 90-day inspection is complete March 2016.

## RISK MANAGEMENT STATUS

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

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments																	
		Month	Trend																		
<b>RL-0013/WBS-013</b>																					
<b>Explanation of major changes to the project monthly spotlight chart:</b>																					
No major changes to the monthly spotlight chart in the month of <b>December</b> .																					
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)																					
WSD-125: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues	A pause in waste processing results in an unexpected container degradation within SWOC (excluding TRU Retrieval activities) and require additional resources to respond. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$5 million, 0 day	<span style="color: red; font-size: 20px;">●</span>	<span style="font-size: 20px;">↔</span>	<p><b>Risk Event:</b> In November 2011, degraded containers were discovered in CWC.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 70%;">Risk recovery action(s)</th> <th style="width: 10%;">Risk Date</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Perform daily/weekly waste container surveillances to identify container abnormalities.</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">10/01/11</td> <td style="text-align: center;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Manage a "watch-list" of waste containers that have shown signs of degradation or are associated with degraded containers.</td> <td style="text-align: center;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Overpack degraded waste packages.</td> <td style="text-align: center;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Process waste packages at a rate funded by RL.</td> <td style="text-align: center;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> Project continued to perform daily/weekly/monthly container surveillances in the month of <b>December</b> to identify container and container cover abnormalities. A PI is currently being negotiated to ship 280 m<sup>3</sup> in FY2016, largely from Outside Storage Area A. A contract is being placed to design and fabricate a large overpack for storage box 75DMA16F3 with a subsequent move into 2403WD. It is expected the contact award date will be November 19, 2015 with a delivery date of late March 2016.</p> <p>A potential impact may be realized due to regulator uncertainties related to the definition of a satisfactory container when corrosion is evident. These uncertainties may result in the inability to efficiently receive waste from on-site generators, i.e., PFP. No alternative course of actions needed at this time; however, a teleconference with EPA concerning the definition of a good drum was held in the month of November. At this time it is undetermined on the timeframe to reach a conclusion. Additional meetings will be set up to discuss potential relief with the regulators.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	10/01/11	On-Going	N/A	Manage a "watch-list" of waste containers that have shown signs of degradation or are associated with degraded containers.	On-Going	N/A	Overpack degraded waste packages.	On-Going	N/A	Process waste packages at a rate funded by RL.	On-Going	N/A
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments														
		Month	Trend															
<b>RL-0013/WBS-013</b>																		
WSD-W130-07: WESF W-130 Class 3 Permit modifications – Ecology	<p>Significant comments or rejection from Ecology on the Class 3 permit modification and closure plan are issued, resulting in cost impacts and schedule delays.</p> <p><b>Risk Handling Strategy:</b> Control</p> <p><b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$0, 144 days</p> <p>*Cost increase will result in cost per day impacts from crews, and hotel load.</p>	●	↔	<p><b>Risk Event:</b> Risk was realized upon receipt of letter of incompleteness from Ecology on closure plan and Class III permit modifications.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Risk recovery action(s)</th> <th style="text-align: center;">Risk Date</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Established logic ties in schedule to prompt request of a temporary authorization in the event that an approved permit is not provided in time to support field execution schedule.</td> <td rowspan="3" style="text-align: center; vertical-align: middle;">3/25/15</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Work with Ecology to resolve areas of incompleteness in permit modification and closure plan.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Obtain Temporary Authorization from Ecology to allow construction activities to proceed without full permit approval</td> <td style="text-align: center;">3/31/16</td> <td style="text-align: center;">10</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> Closure Plan comments have been resolved with Ecology, however a new issue was identified November 3 on closure performance standards for cadmium and chromium. Ecology and RL/CHPRC do not agree on closure performance standards. Certified copy of closure plan and Part A permit modification is planned to be certified and sent to RL for transmittal to Ecology by January 14. Any issues with closure performance standards will be resolved during public comment period. Temporary Authorization to perform construction activities will be requested along with transmittal of the certified closure plan and Part A with approval of TA by March 31, 2016 to avoid impacting schedule, however, additional resources will continue to be necessary to work permitting issues until final permit is issued and implemented. Additional cost for labor resources is incorporated into CP269 R2 through April 2016. No additional alternative course of actions needed at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Established logic ties in schedule to prompt request of a temporary authorization in the event that an approved permit is not provided in time to support field execution schedule.	3/25/15	Complete	100	Work with Ecology to resolve areas of incompleteness in permit modification and closure plan.	Complete	100	Obtain Temporary Authorization from Ecology to allow construction activities to proceed without full permit approval	3/31/16	10
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Obtain Temporary Authorization from Ecology to allow construction activities to proceed without full permit approval		3/31/16	10															
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																		
<b>Lifecycle Risk Triggers</b> (Risk could be realized at any point of the project)																		

Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
<b>RL-0013/WBS-013</b>																			
WSD-019: MLLW & TRU Treatment Impacts	<p>MLLW &amp; TRU treatment capacity/capability does not meet Hanford needs or treatment does not occur as scheduled, resulting in cost impacts.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Very Low (&lt;10%)</p> <p><b>Worst Case Impacts:</b> \$10 million, 0 day</p>	●	↓	<p><b>Risk Trigger Metric:</b> Will continue throughout contract (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Leverage capability at PFNW to utilize their Low-Level Facility (LLF) for the receipt and processing of non-mixed TRU waste from CWC and PFP. The LLF has a separate radioactive material license (RML) from their Mixed Waste Facility (MWF); therefore, allowing additional quantities of NRC defined special nuclear material (SNM) to be received.</td> <td>9/30/16</td> <td>10</td> </tr> <tr> <td>Established multiple treatment contracts for the processing of MLLW and TRU with terms extending to the end of the current CHPRC contract with RL (i.e., September 30, 2018).</td> <td>On-Going</td> <td>N/A</td> </tr> <tr> <td>Continue to work with RL to fund the processing of TRU waste at PFNW at a rate in which keeps them viable (i.e., keeps the doors open).</td> <td>On-Going</td> <td>N/A</td> </tr> <tr> <td>Work with RL and PFNW to increase the quantity of NRC defined special nuclear material (SNM) in PFNW's Mixed Waste Facility (MWF). Their current limit is 200 grams of total Pu. The limit needs to be increased between 400 – 1,000 grams to allow for larger TRUM waste quantities to be received and processed at their MWF.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b>                      Project continues to monitor the PFP situation and how it may affect other planned work for PFNW. The TRUM waste being generated from the PRF Canyon floor cleanout could affect the projects ability to have sufficient treatment capability/capability for the processing of Legacy TRUM waste for the remainder of FY2016 and all of FY2017 and FY2018.</p> <p><b>Current alternative course of action:</b>                      To minimize potential impacts to PFP, the plan is to send the PRF Canyon Floor waste to CWC for interim storage, and then gradually ship the waste packages to PFNW for processing as license limits permit. However by doing this, RL13 will assume the regulatory risk associated with the waste (i.e., more stringent requirements under RCRA at CWC compared to under CERCLA at PFP); additionally, it will still load up PFNW with respect to their Pu limits for several years which will significantly limit the shipment of other Pu containing waste (i.e., legacy large container TRU/M waste) to PFNW for processing.</p>	Mitigation action(s)	FC Date	%	Leverage capability at PFNW to utilize their Low-Level Facility (LLF) for the receipt and processing of non-mixed TRU waste from CWC and PFP. The LLF has a separate radioactive material license (RML) from their Mixed Waste Facility (MWF); therefore, allowing additional quantities of NRC defined special nuclear material (SNM) to be received.	9/30/16	10	Established multiple treatment contracts for the processing of MLLW and TRU with terms extending to the end of the current CHPRC contract with RL (i.e., September 30, 2018).	On-Going	N/A	Continue to work with RL to fund the processing of TRU waste at PFNW at a rate in which keeps them viable (i.e., keeps the doors open).	On-Going	N/A	Work with RL and PFNW to increase the quantity of NRC defined special nuclear material (SNM) in PFNW's Mixed Waste Facility (MWF). Their current limit is 200 grams of total Pu. The limit needs to be increased between 400 – 1,000 grams to allow for larger TRUM waste quantities to be received and processed at their MWF.	On-Going	N/A
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<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)																			
<b>Lifecycle Risk Triggers</b> (Risk could be realized at any point of the project)																			
WSD-097: Major Equipment Failure - T-Plant	<p>T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts, and schedule delays.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Low (10% to 25%)</p> <p><b>Worst Case Impacts:</b> \$2M, 33 days</p>	●	↔	<p><b>Risk Trigger Metric:</b>                      During planned S&amp;M activities a suspect system component is discovered that requires attention, or an unexpected malfunction results in this risk from being realized. This risk will continue throughout the CHPRC (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b>                      The mitigation strategies have been put in place (i.e., aggressive S&amp;M activities), as a result, the risk strategy is to accept with no further mitigation actions.                      Crane PM's where complete in the month of December. Work continues to repair/replace the Crane rail clip.                      No alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A									
Mitigation action(s)	FC Date	%																	
None identified at this time.	N/A	N/A																	

Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
<b>RL-0013/WBS-013</b>																			
WSD-136:CWC Components Fail	CWC facilities and components may reach their end of life or become obsolete. These items will need to be replaced and/or repaired outside of planned funding profiles, resulting in cost impacts.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$1.5M, 0 day	●	↔	<p><b>Risk Trigger Metric:</b> During planned S&amp;M activities a suspect system component is discovered that requires attention, or an unexpected malfunction results in this risk from being realized. This risk will continue throughout the CHPRC (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No changes in the month of <b>December</b>. The mitigation strategies have been put in place (i.e., S&amp;M activities), as a result, the risk strategy is to accept with no further mitigation actions. No alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A									
Mitigation action(s)	FC Date	%																	
None identified at this time.	N/A	N/A																	
WSD-137: OPP: Planned Efficiencies	Funding profile for the contract period are achieved through efficiencies. <b>Risk Handling Strategy:</b> Exploit  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$48 million, 0 day	●	↔	<p><b>Risk Trigger:</b> Will continue throughout project lifecycle (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Opportunity action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Plan work activities and procurements to be as efficient as possible with minimal resources.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Opportunity Assessment:</b> No changes in the month of <b>December</b>. The project is continuing implementation of planned efficiencies (approximately \$50 million to date) and forecasts indicate that the efficiencies will continue through the contract period of performance. No foreseeable impacts in the near future, and no alternative course of actions needed at this time. However, emerging issues continue to place pressure on ability to achieve planned efficiencies.</p>	Opportunity action(s)	FC Date	%	Plan work activities and procurements to be as efficient as possible with minimal resources.	On-Going	N/A									
Opportunity action(s)	FC Date	%																	
Plan work activities and procurements to be as efficient as possible with minimal resources.	On-Going	N/A																	
<b>FY2016 Risk Triggers (Risk could be realized in FY2016)</b>																			
WSD-W130-17: Changes in the final design are needed after the design is issued	Changes in the final design are needed after the design is issued. Changes are driven by unexpected conditions, additional reviews of the design media, or field conditions. Design changes result in cost impacts and schedule delays.  <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$650K, 144 days	●	↔	<p><b>Risk Trigger Metric:</b> Risk trigger will continue throughout project lifecycle.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Maintain tight design configuration and change control.</td> <td>9/30/16</td> <td>15</td> </tr> <tr> <td>Inform change requestors of change impacts and perform informal cost/benefit analysis to determine necessity of change.</td> <td>9/30/16</td> <td>15</td> </tr> <tr> <td>Keep project team and regulators informed of status.</td> <td>9/30/16</td> <td>15</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> Project is investigating potential communication between WESF and B Plant through opening in hot pipe trench. If investigations reveal communication between WESF and B Plant, design change may be necessary to prevent grout from entering B Plant. <b>It is anticipated that investigations will be complete after the air permit is issued (March 31, 2016).</b> No alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	Maintain tight design configuration and change control.	9/30/16	15	Inform change requestors of change impacts and perform informal cost/benefit analysis to determine necessity of change.	9/30/16	15	Keep project team and regulators informed of status.	9/30/16	15			
Mitigation action(s)	FC Date	%																	
Maintain tight design configuration and change control.	9/30/16	15																	
Inform change requestors of change impacts and perform informal cost/benefit analysis to determine necessity of change.	9/30/16	15																	
Keep project team and regulators informed of status.	9/30/16	15																	
WSD-W130-18: Failure of WESF Hot Cell during Grouting	There is a risk that the capacity of the floor or walls of the hot cells cannot sustain the applied loads from grout and fails. In addition, a failure to the cover blocks and or the canyon floor result in cost impacts, and schedule delays.  <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$650K, 144 days	●	↔	<p><b>Risk Trigger Metric:</b> Initiation of hot cell grouting.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform a structural evaluation of the effects of grout on the hot cells and building structures to determine impacts</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Estimate expected volume of hot pipe trench.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.</td> <td>9/30/16</td> <td>0</td> </tr> <tr> <td>Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.</td> <td>9/30/16</td> <td>0</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> <b>No change in the month of December.</b> Structural evaluations and calculations have been completed and identified controls necessary during grouting (limit lifts of grout placement to 3 feet, compare actual grout volume placed to calculate estimated volume). No alternative course of actions needed at this time.</p>	Mitigation action(s)	FC Date	%	Perform a structural evaluation of the effects of grout on the hot cells and building structures to determine impacts	Complete	100	Estimate expected volume of hot pipe trench.	Complete	100	Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.	9/30/16	0	Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.	9/30/16	0
Mitigation action(s)	FC Date	%																	
Perform a structural evaluation of the effects of grout on the hot cells and building structures to determine impacts	Complete	100																	
Estimate expected volume of hot pipe trench.	Complete	100																	
Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.	9/30/16	0																	
Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.	9/30/16	0																	
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>																			
No unassigned risks identified in the month of <b>December</b> .																			

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	8.8	7.5	6.3	(1.3)	-15.3%	1.2	15.9%

Numbers are rounded to the nearest \$0.1 million

#### CM Schedule Performance (-\$1.3M/-15.3%)

The current month unfavorable schedule variance is due to accelerated RH/Large Box Repack scope that has been completed in prior periods but planned in the current period.

#### CM Cost Performance (+\$1.2M/+15.9%)

The current month favorable cost variance is due to implementation of planned efficiencies such as resource sharing of multiple scopes of work.

## Contract-to-Date (CTD)

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	1,006.8	1,008.1	947.4	1.2	0.1%	60.7	6.0%	1,336.0	1,254.7	81.3

Numbers are rounded to the nearest \$0.1 million

#### CTD Schedule Performance (+\$1.2M/+0.1%)

The schedule variance is within threshold.

#### CTD Cost Performance (+\$60.7M/+6.0%)

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

#### Variance at Completion (+\$81.3M/+6.1%)

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)

FY2016			
WBS 013/RL-0013 Waste and Fuels Management Project	Projected Funding	Spending Forecast	Spend Variance
RL-0013	109.6	107.3	2.3

Numbers are rounded to the nearest \$0.1 million.

### Funds/Variance Analysis

FY2016 project funding for RL-0013 was unchanged. The FYSF was decreased from \$108.6 million to \$107.3 million by adjusting the forecast FTEs downward to reflect the sustained efficiencies anticipated for the remainder of the fiscal year.

### Critical Path Schedule

Critical path analysis can be provided upon request.

### Baseline Change Requests

BCR-013-16-004R0, *Definitization of CO #277, Super 7A Trailer*

BCR-013-16-009R0, *CO #263, ERDF Leachate Transfer Pipeline Construction*

BCR-013-16-010R0, *WESF Stack Monitoring Planning Package to Detailed Work Package*

BCR-013-16-011R0, *Definitization of CO #274, CWC Box NDA Campaign*

BCR-013-16-012R0, *Environmental and Regulatory Enhancements*

BCR-013-16-013R0, *Re-plan Ecology Agreed Order Tasks*

BCR-PRC-16-018R0, *Undistributed Budget Adjustments December 2015*

## 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-091-44Z-006	Annual PMM or Quarterly Notification of Cert of CH/RH TRUM.	12/31/15	12/10/15	--	Completed
C-026-07J	Tritium Treatment Technology Development to Ecology and EPA	3/31/16		3/31/16	On Schedule

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-091-03J	Submit Revision of TRUM Waste and MLLW PMP to Ecology.	6/30/16		6/30/16	On Schedule
M-091-01A	Complete Conceptual Design for RH TRUM and TRUM Facilities and Change Package.	9/30/16		--	To Be Missed – realignment of select M-091 milestones deletes this milestone.
M-091-040	Complete retrieval and designation of CH RSW in Burial grounds 218-W-4B, W-3A, and E-12B	9/30/16		--	To Be Missed – realignment of select M-091 milestones deletes this milestone.
M-091-41A	Complete retrieval of non-caisson RH RSW.	9/30/16		--	To Be Missed – realignment of select M-091 milestones deletes this milestone.
M-091-44Q	Certify 300 cubic meters large container CH TRUM and/or RH TRUM Waste.	9/30/16	5/26/11	--	Completed
M-091-46F	Certify 250 cubic meters of small container CH TRUM waste.	9/30/16		--	To Be Missed – realignment of select M-091 milestones deletes this milestone.
P-091-47B	Certify or treat 280 cubic meters of TRUM/MLLW waste in FY2016.	9/30/16		9/30/16	On Schedule
P-091-51	Submit secondary document for new or modified facilities to process all Hanford Site RH TRUM waste.	9/30/16		9/30/16	On Schedule
M-091-44Z-007	Annual PMM or Quarterly Notification of Cert of CH/RH TRUM.	12/31/16		12/31/16	On Schedule

## SELF-PERFORMED WORK

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

## GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
<b>CONTRACT</b>			
J.12/C.2.3.6	PBS-13, Transuranic Waste Certification	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the CBFO.	Ongoing (pending restart of WIPP Shipments)

# Section D

## Soil and Groundwater Remediation Project (RL-0030)



**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 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

Pump & Treat (P&T) Operations continued making progress on the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial process documentation for the RCCC. 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)		Uranium (kg)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX P&T	34.7	101	6.6	21.3								
HX P&T	19.0	57.6	2.1	6.8								
KR-4 P&T	13.6	40.6	0.4	1.1								
KW P&T	14.6	43.5	0.8	2.7								
KX P&T	37.5	106.4	2.5	6.8								
200 West P&T	86.9	254.1	6.7	19.3	195	622	7739	21783	2.8x10 <sup>12</sup>	7.7x10 <sup>12</sup>	2.7	5.8
<b>Combined</b>	<b>206.3</b>	<b>603.2</b>	<b>18.9</b>	<b>57.8</b>	<b>195</b>	<b>622</b>	<b>7739</b>	<b>21783</b>	<b>2.8x10<sup>12</sup></b>	<b>7.7x10<sup>12</sup></b>	<b>2.7</b>	<b>5.8</b>

Well Drilling by Area	FY2016 Planned	December	FY2016 Cumulative
100-KR-4	3	-	-
100-HR-3	8	-	-
200-UP-1	4	-	-
200-UP-1 Chromium Plume	3	-	-
200-ZP-1 C9521	1	-	-
200-ZP-1 monitoring	2	-	1
M-24 Milestone 100-NR-2	6	-	-
M-24 Milestone C Farm	1	-	-
Vadose Zone	1	-	-
100 F I/U	8	-	-
<b>Total Wells</b>	<b>37</b>	<b>-</b>	<b>1</b>

## EMS Objectives and Target Status

Objective	Target	Actions	Due Date	Status	Overall Target Status
16-EMS-SGWR-OB1 Monitor and confirm low carbon tetrachloride emissions at the 200 West P&T Facility	T1 – Evaluate treated off gas analytical results from compliance sampling and process sampling each quarter.	Compile 1 <sup>st</sup> quarter emissions evaluation.	12/31/15	100%	25%
		Compile 2 <sup>nd</sup> quarter emissions evaluation.	3/31/16	0%	
		Compile 3 <sup>rd</sup> quarter emissions evaluation.	6/30/16	0%	
		Compile 4 <sup>th</sup> quarter emissions evaluation and complete work site assessment on FY2016 emissions.	9/30/16	0%	
16-EMS-SGWR-OB2 More effective promotion of EMS	T1 – Promote and increase S&GRP project personnel EMS awareness via various means throughout FY2016.	Present four EMS topics to S&GRP personnel, typically during the S&GRP Monday Tailgate, S&GRP Supervisors' Meeting, or S&GRP All-Hands Meeting.	9/30/16	25%	25%
16-EMS-SGWR-OB3 Promote a more thorough understanding of the regulatory umbrella under which S&GRP conducts operations.	T1 – Promote and increase S&GRP project personnel environmental regulatory awareness via various means, targeting small group settings, throughout FY2016.	Facilitate four regulatory related discussions based on such topical areas as RCRA Permit, CERCLA Decision Documents, Waste Management, Air Permit, etc. These discussions would typically be targeted at smaller S&GRP group settings such as staff meetings, department meetings, PODs, etc.	9/30/16	0%	0%
16-EMS-SGWR-OB4 Reduce the risk of noncompliance with environmental requirements.	T1 – Develop compliance matrices for S&GRP Pump-and-Treat facilities CERCLA RD/RAWPs.	Identify implementing mechanisms and gaps for environmental requirements (i.e., requirement matrices) for the following RD/RAWPs: DOE/RL-96-84, Revision 0 and 0-A, DOE/RL-2006-52, DOE/RL-2006-75, and DOE/RL-2008-78.	9/30/16	0%	0%

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	1	1	12/22/2015 – While moving a ladder an employee slipped on a patch of ice and felt a tear in his abdomen. The employee was transported to HPMC for examination. (23904)
Total Recordable Injuries	1	2	12/22/2015 – While moving a ladder an employee slipped on a patch of ice and felt a tear in his abdomen. The employee was transported to HPMC for examination. (23904)
First Aid Cases	3	44*	<p>12/4/2015 – Employee smelled a strong odor while working around a purge truck. The employee’s eyes began to burn and he experienced a sore throat. The employee was taken to HPMC the following morning for evaluation and released with no restriction. (23890)</p> <p>12/14/2015 – Employee strained his back while size reducing piping. The employee was taken to HPMC, diagnosed with lumbar strain and sprain, treated with an ice pack and returned with restriction. (23898)</p> <p>12/21/2015 – Employee reported minor pain in lower abdomen after employee lifted chairs up stairs. The employee was examined at HPMC and returned to work with no restriction. (23903)</p> <p>*13 FA cases, PTS in support of RL-0030.</p>
Near-Misses	1	2	12/29/2015 - A Soil and Groundwater Remediation Project (S&GRP) well maintenance crew was performing a routine cleaning of 699-36-70A when the sand line (i.e. auxiliary cable) roller guide pin failed, causing the sand line roller guide (i.e. a v-pulley) assembly to come apart and fall approximately twenty-five feet from the top of the well maintenance truck mast to the ground. The roller guide assembly weighs approximately five pounds, and landed near the drill rig operator.

## KEY ACCOMPLISHMENTS

### RL-0030.01 RL 30 Operations River Corridor

#### 100-BC-5 Operable Unit

- Conducted a 2-day RI/FS storyboard session on December 1-2, 2015, focusing on key objectives to: 1) Establish a collective understanding of key messages/themes for the document, 2) Identify necessary and relevant supporting information, and 3) Define a road map for how supporting information should be organized to facilitate its use by Tri-Party decision makers. Presented status of RI/FS report development to Environmental Protection Agency (EPA) on December 3, 2015.
- Received EPA approval of the Revision 2 100-BC-5 sampling and analysis plan on December 9, 2015.

- Delivered vadose zone maps to RL on December 15, 2015, indicating locations where hexavalent chromium has been detected.

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

- Received ecological and cultural clearance letter on December 20, 2015, for construction of eight monitoring wells to be installed spring 2016.

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

- Resolved Ecology's comments on the Interim Action RD/RAWP, SAP, and O&M plans; final document preparation is underway.
- Provided preliminary responses to EPA legal comments on the proposed plan to RL on December 17, 2015.

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

- Submitted Draft A Interim Action RD/RAWP, SAP and O&M plans to RL on December 17, 2015; for subsequent transmittal to EPA for review.

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

- Received Ecology's comments on the interim RD/RAWP and integrated SAP on December 15, 2015.
- Completed the revised fate and transport modeling for the strontium-90 plume and for the release of strontium-90 and tritium from the partially remediated waste site 100-N-66 (fuel storage basin).

### **Central Plateau**

#### **200-BP-5 and 200-PO-1 Operable Units**

- Presented the preliminary 200-BP-5 treatability test results to Ecology and EPA on December 17, 2015. The path forward is to continue with groundwater extraction to further assess contaminant removal.
- Completed the 30 percent design package for internal review for the 200-BP-5 pipeline extension from current extraction well 299-E33-268 to well 299-E33-360.

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

- Completed TPA milestone M-016-191 to initiate startup operations for the U Plant area P&T system for uranium and technetium-99, and the iodine-129 hydraulic containment system. The system achieved a total extraction rate of 150 gpm at the uranium extraction and treatment system on December 7, 2015.

#### **200-IS-1 Operable Unit**

- Initiated 45 new waste site scoping summaries; re-prioritized production based on proximity to U Plant and PFP.
- Submitted draft change package C-13-01 for RL review on December 15, 2015, (change package incorporates the TSD agreements between RL and Ecology and describes the criteria used during the workshops for TSD determination). Received and resolved RL comments and resubmitted the revised change package to Ecology on December 17, 2015.

#### **200-SW-2 Operable Unit**

- Provided the *Mixed Waste Disposed of in the Low-level Burial Grounds* (DOE/RL-2014-43, Revision 1) to RL on December 16, 2015.

#### **200-DV-1**

- Initiated sonic drilling at the BY Cribs on December 17, 2015.

**Groundwater P&T Facilities**

**200 West P&T**

- Operated the 200 West P&T an average of 1,948 gpm.

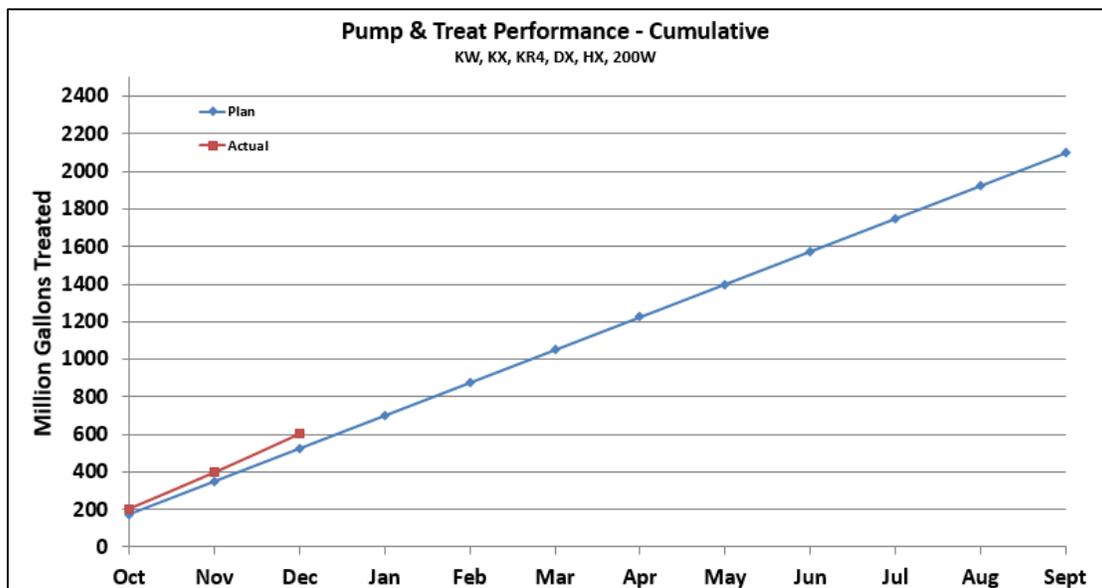
**100 Area P&Ts**

- Operated the DX P&T at 777 gpm, above the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 305 gpm, near the facility capacity of 330 gpm.
- Operated the KW P&T at 327 gpm, at the facility capacity of 330 gpm.
- Operated the KX P&T at 841 gpm, near the facility capacity of 900 gpm.
- Operated the HX P&T at maximum extraction well capacity. Monthly average at approximately 425 gpm.

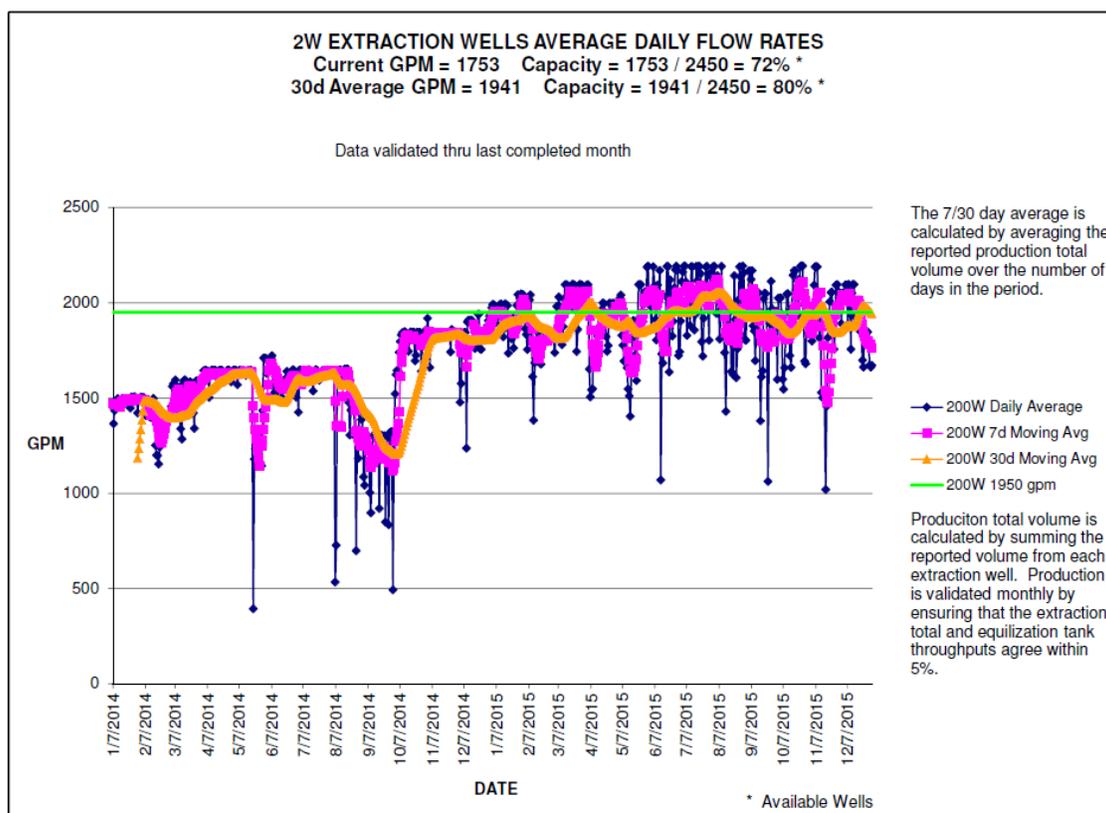
**Perched Water (200-DV-1)**

- Removal of the perched water has been shut down since August 2015 to modify the existing well and to add two new perched water removal stations. System construction was completed and Operational Acceptance Testing is on-going for the modified perched water system.

**FY2016 P&T Operations**



## 200 West P&amp;T



## MAJOR ISSUES

**Issue:**

Field work has been delayed due to the Section 106 Cultural Resource Review (CRR) and approval process for work within the TCP. This issue originally impacted performance of the 100-NR-2 apatite barrier in FY2014, and later the installation of the six M-24 milestone monitoring wells and D&D of the P&T facility in FY2015. Notified by MSA on November 19, 2015, that some of the proposed scope associated with the FY2016 P&T Optimization Plan is within the boundaries of the TCP and will be impacted.

**Corrective Action:**

Develop and implement an approach for preparing the CRRs and conducting the associated Memorandum of Agreement (MOA) workshops to allow more rapid completion of the MOA process so field work can be performed within the TCP. In the meantime, move impacted work scope to FY2017 and beyond.

**Status:**

Informed by MSA on December 22, 2015 that the Yakama Nation signed the MOAs for the 100-NR-2 work scope (well drilling and D&D of the P&T facility). These MOAs are expected to be approved in January 2016 following SHPO/ACHP signature. For the 100-HR-3 and 100-KR-4 OUs, the P&T optimization scope is being revised to only include the activities that occur outside of the TCP. A path forward is being developed between RL, MSA, and CHPRC to address the issue of working in a TCP.

**Issue:**

Experiencing regulatory agency delays in the approval of decision documents, including the legal reviews of the 100-D/H Proposed Plan (DOE/RL-2011-111), extended comment resolution on the 100-N RI/FS Report (DOE/RL-2012-15, Draft A), Ecology approval of the 200-IS-1 Tri-Party Agreement change packages (C-013-01 and C-014-02), which affect the 200-IS-1 RI/FS Work Plan (DOE/RL-2010-114) scope definition, and Ecology review of the Draft A 200-BP-5 RI/200-PO-1 RI Addendum.

**Corrective Action:**

Maintain visibility on these delays to senior management. RL/CHPRC to continue working with the regulatory agencies to facilitate completion of these documents. Submit NOC letters to RL as contract activities are impacted.

**Status:**

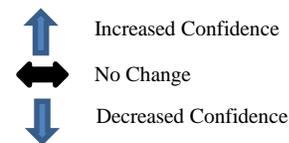
Delays in completion of the decision documents are reported weekly to RL management and monthly to RL, EPA, and Ecology senior management. Specific document status includes:

- 100-HR-3: EPA legal comments were received on the Proposed Plan (PP) and comment resolution is underway. RL to review changes with EPA/Ecology for final concurrence. Working toward a planned early February 2016 issuance of the PP for public comment.
- 100-NR-2: The regular weekly comment resolution meetings with Ecology on the RI/FS were not held in December due to regulator staff availability and the holidays. The next meeting is scheduled for early January 2016.
- 200-IS-1: Provided updated change package to RL on December 17, 2015; RL provided to Ecology on December 19, 2015.
- 200-BP-5 & 200-PO-1: Ecology announced (letter 15-NWP-189, dated October 23, 2015) that they are suspending review of the 200-BP-5 and 200-PO-1 Remedial Investigation (RI) reports. The issue deals with the role of the Tank Closure & Waste Management EIS models and its use in CERCLA investigations. This issue has been elevated to RL senior management for resolution. A half day workshop has been scheduled with Ecology for January 20, 2016.

## RISK MANAGEMENT STATUS

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

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
<b>RL-0030/WBS-030</b>																
<b>Explanation of major changes to the project monthly spotlight chart:</b> No major changes to the risk spotlight chart in the month of <span style="color: red;">December</span>																
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)																
OPPORTUNITY: SGW-007A: Sampling Requirement Reduction	Reduction in field sampling (locations, frequency, or total number of samples collected) has the opportunity to reduce cost. <b>Risk Handling Strategy:</b> Exploit  <b>Probability:</b> Medium (26% to 74%)  <b>Worst Case Impacts:</b> \$3 million, 0 day	<span style="color: green; font-size: 20px;">●</span>	<span style="font-size: 20px;">↔</span>	<b>Opportunity Event:</b> The <i>Optimization Plan to Revise the Groundwater Sampling Plan</i> is final and provides the roadmap to revise all groundwater SAPs over the next two years.  <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: left;">Opportunity action(s)</th> <th style="text-align: left;">FC Date</th> <th style="text-align: left;">%</th> </tr> </thead> <tbody> <tr> <td>Develop schedule for completing RL Panel Review on the SAPs.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Obtain RL approval of the revised SAP.</td> <td>12/31/15</td> <td>58</td> </tr> <tr> <td>Obtain Agency approval of the revised SAPs.</td> <td>9/30/16</td> <td>10</td> </tr> </tbody> </table> <b>Opportunity Assessment:</b> In December, the 200-ZP-1 and 100-KR-4 SAPs were transmitted to RL on December 17, 2015 for subsequent transmittal to the Agencies. This completes the revisions of the CERCLA SAPs and transmittal to RL for concurrence. Ecology's comments on the 100-HR-3 SAP have been resolved and the revised document is expected to be issued in January 2015. Ecology suspended review of the 200-BP-5 and 200-PO-1 SAPs pending resolution of the RI reports.  RL's and Ecology comments on the three remaining RCRA groundwater monitoring plans have been resolved and the revised documents were transmitted to RL in mid-December.  RL's comments on the draft AEA groundwater monitoring plan were incorporated and the Revision 0 document was transmitted to RL on December 15, 2015. No alternative course of actions are needed at this time.	Opportunity action(s)	FC Date	%	Develop schedule for completing RL Panel Review on the SAPs.	Complete	100	Obtain RL approval of the revised SAP.	12/31/15	58	Obtain Agency approval of the revised SAPs.	9/30/16	10
Opportunity action(s)	FC Date	%														
Develop schedule for completing RL Panel Review on the SAPs.	Complete	100														
Obtain RL approval of the revised SAP.	12/31/15	58														
Obtain Agency approval of the revised SAPs.	9/30/16	10														
PRC-005: Delayed Document Approvals	Required regulatory, nuclear safety, or transportation safety documents are not approved within the scheduled timeframes and impact CHPRC scheduled activities. <b>Risk Handling Strategy:</b> Transfer  <b>Probability:</b> Very Likely (>90%)  <b>Worst Case Impacts:</b> TBD	<span style="color: red; font-size: 20px;">●</span>	<span style="font-size: 20px;">↔</span>	<b>Risk Event:</b> Progress on several key decision documents have been delayed due to regulator comments and resource availability: <ul style="list-style-type: none"> <li>100-D/H PP: The draft Revision 0 100-D/H PP was provided to Ecology in September 2014 for review. EPA Remedy Review Board (RRB) began on January 26, 2015, and comments were received by CHPRC on April 30, 2015. Additional technical reviews by Ecology have been completed. Ecology legal review began June 9, 2015, and is scheduled for 30 calendar days. Ecology legal review extended from July 10, 2015, to July 17, 2015. Ecology legal comments were received on August 5, 2015. Proposed responses to comments were submitted to Ecology on August 27, 2015. Following Ecology legal review, the revised PP was submitted for EPA legal review in early September 2015. <b>Comment resolution completed December 17, 2015. RL to review comment resolution with EPA/Ecology prior to finalizing PP.</b></li> <li>100-N RI/FS: The Draft A 100-N RI/FS and PP were provided to Ecology on June 24, 2013, completing Milestone M-015-75. Comments were received on October 2, 2013. Comment resolution has continued, which includes meetings to resolve comments chapter by chapter and preparation of several technical position papers for the FS. The team plans to complete work on all RI chapters by the end of January 2016. At that point, work will progress to the FS. Due to the limited availability of Ecology's staff, revision of the RI/FS is expected to continue for the next 90-days. 200-IS-1 RI/FS Work Plan (WP): RL invoked dispute resolution on December 10, 2013, for Tri-Party Agreement milestone M-015-112,</li> </ul>												

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																	
		Month	Trend																		
<b>RL-0030/WBS-030</b>																					
				<p>Submit Draft B 200-IS-1 OU RI/FS WP. Resolution of this dispute, which includes the 200-IS-1 OU waste sites and TSD/past practice status, is required before the Draft B RI/FS WP can be submitted.</p> <ul style="list-style-type: none"> <li>On October 23, 2015, Ecology submitted a letter that suspended their review of the Draft A 200-BP-5 RI report and Draft A 200-PO-1 RI report addendum due to issues related to fate and transport modeling.</li> </ul> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.</td> <td rowspan="4" style="text-align: center;">04/30/15</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Resolution with Ecology on Draft A 100-N RI/FS Report.</td> <td>Ongoing</td> <td>79</td> </tr> <tr> <td>Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.</td> <td>1/30/16</td> <td>50</td> </tr> <tr> <td>Resolution with Ecology on the Draft A 200-BP-5/200-PO-1 RI Report</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Risk Assessment:</b></p> <ul style="list-style-type: none"> <li>100-D/H PP: RL submitted proposed responses to Ecology on August 27, 2015. Meeting between RL, EPA and Ecology was held on September 2, 2015, to resolve comments. The revised draft PP was submitted to EPA for a 30-day legal review on September 2, 2015. EPA legal comments were received on November 5, 2015. <b>Comment resolution completed December 17, 2015. RL reviewing comment resolution with EPA/Ecology prior to finalizing PP.</b></li> <li>100-N RI/FS: Comment resolution with Ecology on the Draft A 100-N RI/FS Report continues with the RI (Chapters 6 and 7). Ecology extended the comment resolution period to December 31, 2015 (15-NWP-179) and reportedly will extend the project again by the end of December for an additional 90-days. Ecology's staff availability continues to impact the completion schedule. 200-IS-1 RI/FS WP: Ecology is unwilling to sign Tri-Party Agreement change packages C-13-01 and C-14-02 until all TSDs are clearly identified. These change packages add 231 waste sites into 200 IS-1 Appendix C. In November, the dispute resolution was further extended to January 28, 2016. A revised change package was submitted to RL on December 17, 2015; RL submitted to Ecology on December 19, 2015. Project team continues to prepare scoping summaries based on the waste sites identified in the draft change package.</li> <li>200-BP-5 RI/FS: Ecology suspended their review of the Draft A RI/FS on October 23, 2015, due to issues related to fate and transport modeling. <b>A meeting with Ecology is schedule for January 20, 2016.</b></li> <li>200-IS-1 RI/FS WP: Ecology is unwilling to sign Tri-Party Agreement change packages C-13-01 and C-14-02 until all TSDs are clearly identified. These change packages add 231 waste sites into 200 IS-1 Appendix C. In November, the dispute resolution was further extended to January 28, 2016. A revised change package was submitted to RL on December 17, 2015; RL submitted to Ecology on December 19, 2015. Project team continues to prepare scoping summaries based on the waste sites identified in the draft change package.</li> </ul>	Risk recovery action(s)	Risk Date	FC Date	%	Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.	04/30/15	Ongoing	N/A	Resolution with Ecology on Draft A 100-N RI/FS Report.	Ongoing	79	Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.	1/30/16	50	Resolution with Ecology on the Draft A 200-BP-5/200-PO-1 RI Report	Ongoing	N/A
Risk recovery action(s)	Risk Date	FC Date	%																		
Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.	04/30/15	Ongoing	N/A																		
Resolution with Ecology on Draft A 100-N RI/FS Report.		Ongoing	79																		
Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.		1/30/16	50																		
Resolution with Ecology on the Draft A 200-BP-5/200-PO-1 RI Report		Ongoing	N/A																		
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																					
No critical risks identified in the month of <b>December</b> .																					
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)																					
No high risks identified in the month of <b>December</b> .																					
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)																					
No unassigned risks identified in the month of <b>December</b> .																					

## 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	9.3	8.4	7.7	(0.9)	-9.9%	0.7	8.5%

Numbers are rounded to the nearest \$0.1 million.

#### CM Schedule Performance (-\$0.9M/-9.9%)

The negative schedule variance resulted from the following:

- Performance of the cumulative impact analysis earned ahead of plan in FY2015 resulting in negative current period schedule variance as the variance returns to zero.
- Scope associated with the 200 East closure plans, outer area decision documents, composite analysis, and 200-UP-1 drilling campaign has been deferred to align with the integrated priority list and available funding.
- Unexpected radiological levels encountered at both the BY Cribs and TW-1/2 areas at depths greater than planned and broken casings in two boreholes the current month has resulted in a negative schedule variance.
- This is offset, in part, by performance taken for completing the 200W P&T unloading station and safety platform construction which was planned in prior months.

#### CM Cost Performance (+\$0.7M/+8.5%)

The positive cost variance resulted from the following:

- Lower labor costs due to the holidays and staff working on other priority projects.

## 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	1,181.8	1,172.8	1,153.0	(9.1)	-0.8%	19.8	1.7%	1,568.0	1,516.7	51.3

Numbers are rounded to the nearest \$0.1 million.

#### CTD Schedule Performance (-\$9.1M/-0.8%)

The variance is within reporting thresholds.

#### CTD Cost Performance (+\$19.8M/+1.7%)

The variance is within reporting thresholds.

#### Variance at Completion (+\$51.3/+3.3%)

The variance is within reporting thresholds.



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

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

RL-0030 Soil and Groundwater Remediation	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
RL-0030	126.1	125.3	0.8

Numbers are rounded to the nearest \$0.1 million

### Funds/Variance Analysis

FY2016 initial budget guidance received from RL reflects expected funding of \$509.3 million for the company. RL-0030 project funding is \$126.1 million for FY2016. The FYSF of \$125.3 million includes actions anticipated to achieve funding targets.

### Critical Path Schedule

Critical path analysis can be provided upon request.

### Baseline Change Requests

BCR-030-16-013R0, *Incorporate TPA M-016-193, Complete Remedial Design Investigation of SE Chromium Plume*  
 BCR-030-16-014R0, *CO #299, 200W P&T Systems Membrane Bioreactor Cassette Additions*  
 BCR-030-16-015R0, *Definitization of CO #272, Build and Implement Portable Remediation Treatment*  
 BCR-030-16-016R0, *Definitization of CO #292, 200-SW-2 RIFS WP Aerial Radiation Survey*  
 BCR-030-16-017R0, *CO #266, 200-BP-5 OU Construction and O&M of Transfer Pipelines*  
 BCR-PRC-16-017R0, *200-CW-5 and 200-PW-1/3/6 RD/RAWP Realized Risk*  
 BCR-PRC-16-018R0, *Undistributed Budget Adjustments December 2015*

## MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant achievements in project execution. Enforceable Tri-Party Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key activities. The PMB Annual Update, implemented in September 2013, and subsequent approved BCRs define CHPRC planning with respect to Tri-Party Agreement milestones. A Tentative Agreement for Tri-Party Agreement Milestone series M-015, M-016, M-037, M-085 and M-094 was signed on October 26, 2015. This agreement is in public review through January 15, 2016 (extended from December 11, 2015). The following table is a one year look ahead of RL-0030 Tri-Party Agreement enforceable milestones, non-enforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
<b>Complete Milestones</b>					
M-091-40L-048	Submit July to Sept. 4th Quarter FY2015 Burial Ground Sample Results.	12/15/15	12/10/15		Complete
M-016-191	Complete acceptance test procedures and operational test procedures and initiate startup operations for the U Plan area P&T for uranium and tech-99, and Iodine-129 hydraulic containment system	3/30/16	12/7/15		Complete; preparation of transmittal letter is underway.
<b>Milestones in Dispute</b>					
M-015-112	Submit Draft B, 200-IS-1 Operable Unit Pipeline System Waste Sites RFI/CMS/RI/FS Work Plan to Ecology	2/28/14		TBD	Dispute resolution extended to January 28, 2016 (Tri-Party Agreement Change Control Form M-15-13-02)
<b>Milestones Included in Tentative Agreement</b>					
M-015-21A	Submit 200-BP-5 & 200-PO-1 OU FS Report and PP(s) to Ecology	6/30/15		9/30/16	Proposed due date is 6/30/2018
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	6/30/15		9/30/17	Proposed due date is 9/30/2017
M-015-110B	Submit CMS & FS & PP/Proposed CA Decision for 200-DV-1 OU to Ecology	9/30/15		6/24/19	Proposed due date is 9/30/2023
M-015-91B	Submit FS Report and PP for 200-WA-1 to EPA	12/31/15		4/30/17	Proposed due date is 7/31/2021
M-015-38B	Submit Revised FS Report and PP for CW-1, CW-3, & OA-1 to EPA	10/30/15		6/10/19	Proposed due date is 7/31/2023
<b>Milestones on Schedule</b>					
M-015-78	Complete two years of groundwater and aquifer tube sampling at the 100-BC expanded monitoring network in accordance with the revised 100-BC-1,2 and 5 RI/FS Work Plan/SAP	2/28/16		2/24/16	On schedule

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-091-40L-049	Submit Oct. to Dec. 1st Quarter FY2016 Burial Ground Sample Results.	3/15/16		3/15/16	On schedule
M-024-58I	Initiate Discussions of Well Commitments	6/1/16		6/1/16	On schedule
M-091-40L-050	Submit Jan to March 2nd Quarter FY2016 Burial Ground Sample Results.	6/15/16		6/15/16	On schedule
M-024-67-T01	Conclude Discussions of Well Commitments	8/1/16		8/1/16	On schedule
M-091-40L-051	Submit Apr to Jun 3rd Quarter FY2016 Burial Ground Sample Results.	9/15/16		9/15/16	On schedule
M-015-79	Submit RI/FS Report/PP for 100-BC-1/2/5 OUs for GW & Soil	12/15/16		12/15/16	On schedule
M-091-40L-052	Submit July to September 4th Quarter FY2016 Burial Ground Sample Results	12/15/16		12/15/16	On schedule
M-016-110-T03	Contain the Strontium-90 GW plume at the 100-NR-2 OU	12/31/16		9/19/19	Unable to accomplish work due to TCP
M-016-110-T04	Implement Remedial Actions in all 100A RODs for GW OUs	12/31/16		8/24/16	On schedule
M-024-67	DOE Shall Complete Construction of all Wells Listed	12/31/16		8/1/16	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)



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

**December 2015**  
CHPRC-2015-12, 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 completed the Annual Surveillance post job and installed air conditioning transition pieces in REDOX. In addition, 291AE was down posted from collection area to Radiological Buffer Area (RBA) and RMA PUREX-005 was down posted. The project also transmitted the 219-Z-9 Safety Basis to RL and received RL concurrence on PUREX Revision 9 Criteria Document.

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

## KEY ACCOMPLISHMENTS

- Operations/Maintenance:
  - o Completed REDOX Annual Surveillance post job.
  - o Completed REDOX installation of air conditioning transition pieces.
  - o Completed Annual Chemical Inventory.
  - o Down posted 291AE from collection area to RBA.
  - o Down posted RMA PUREX-005.
  - o Installed spill kit in 221-BK.
  - o Replaced B Plant Damper EF-1.
  - o Performed Fire Communication System alarm panel checks for building 405.
- Completed:
  - o 75 radiological facility surveillances.
  - o 21 PM activities.
- Nuclear Safety:
  - o Transmitted 219-Z-9 Safety Basis to RL.
  - o Received RL concurrence on PUREX Revision 9 Criteria Document.
  - o Routing 224-B DSA for internal approval prior to RL submittal (Anniversary date January 22).
  - o Received RL acceptance on Tank 241-Z-361 Safety Basis Review Comment Record (RCR) dispositions and Tank Safety Basis is currently out for internal review.

- o Completed walk down for hazard categorization of PUREX ancillary structures.
- 207A South Retention Basin Closure:
  - o Resolved comments from Public Review of Closure Plan and State Environmental Policy Act (SEPA) checklist.
  - o Received analytical results from sampling of soil to verify that cleanup levels have been met; awaiting completion of 3<sup>rd</sup> party validation and verification.
  - o Drafted request for extension of Temporary Authorization.
- REDOX Roof Replacement Design:
  - o Completed review of 90 percent design and obtained comments.
- Continued Progress on Canyon Stabilization Documents:
  - o Submitted four Closure Plans to RL for review.
  - o Submitted changes for DSA to support Canyon Risk Mitigation efforts for REDOX.
- Suspect Plutonium Nitrate Bags:
  - o Initiated development of waste procedure for TRU waste.
- Demolish REDOX Ancillary Facilities
  - o Initiated characterization, cold and dark, and demolition planning and work package preparation.

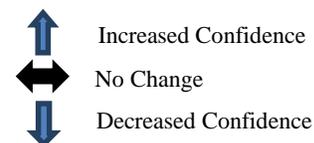
## MAJOR ISSUES

None currently identified.

## RISK MANAGEMENT STATUS

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

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
<b>RL-0040/WBS-040</b>				
<b>Explanation of major changes to the project monthly stoplight chart:</b>				
No major changes to the monthly stoplight chart in the month of <b>December</b> .				
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of <b>December</b> .				
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in the month of <b>December</b> .				
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)				
<b>Lifecycle Risk Triggers</b> (Risk could be realized at any point of the project)				

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
<b>RL-0040/WBS-040</b>										
D4-064: Aging Building Systems/Components	Problems with aging building systems/components (e.g., roofing/structures, etc.) result in inoperability or requires unscheduled maintenance/ outages, resulting in cost impacts.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$2 million, 0 day			<b>Risk Trigger Metric:</b> During routine surveillance activities unforeseen events cause systems to be compromised. This is a lifecycle risk and will continue through the CHPRC (September 30, 2018).  <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <b>Mitigation Assessment:</b> No changes in the month of <b>December</b> . The mitigation strategies have been put in place (i.e., continuous surveillance activities for high risk areas), as a result, the risk strategy is to accept with no further mitigation actions or alternate course of actions identified at this time.	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of <b>December</b> .										

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	1.1	1.0	1.2	(0.1)	-8.3%	(0.1)	-13.3%

Numbers are rounded to the nearest \$0.1 million

**CM Schedule Performance: (-\$0.1M/-8.3%)**

The schedule variance is within reporting thresholds.

**CM Cost Performance: (-\$0.1M/-13.3%)**

The cost variance is within reporting thresholds.

### Contract-To-Date

(\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	406.1	405.9	374.3	(0.2)	-0.0%	31.6	7.8%	473.5	438.6	34.9

Numbers are rounded to the nearest \$0.1 million

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

The schedule variance is within reporting thresholds.

**CTD Cost Performance: (+31.6M/+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), efficiencies with Arid Lands Ecology (ALE) (\$3.7 million) and North Slope Facilities (\$1.2 million), disposition of railcars D&D (\$2.1 million), and Industrial 7 Project (\$3.6 million). This is offset by increased material and equipment costs, unexpected asbestos levels, and schedule delays in other ARRA D4 Projects (-\$15.3 million). Efficiencies in Outer Area Waste Sites (\$6.7 million) are primarily due to Remove, Treat, and Dispose (RTD) O-Zone Waste Sites, and ERDF 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 (\$1.0 million), S&M costs less than expected (\$4.3 million), U Plant completion of the sampling of Cell 30 with less resources than planned (\$1.1 million), Program Management utilizing less resources (\$3.5 million), Emergency Response activities (\$0.6 million) and an underrun in overhead allocations (\$2.1 million).

**Variance at Completion (+\$34.9M/+7.4%)**

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

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

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

WBS 040/RL-0040 Nuclear Facility D&D	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
RL-0040	24.6	23.2	1.4

Numbers are rounded to the nearest \$0.1 million.

**Funds/Variance Analysis**

Project funding is unchanged from last month. The FYSF change in FY2016 increased slightly from \$23.0 million to \$23.2 million.

**Critical Path Schedule**

Critical path analysis can be provided upon request.

**Baseline Change Requests**

BCR-PRC-16-018R0, *Undistributed Budget Adjustments December 2015*

### MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-250	Develop three-year rolling prioritized scheduled to implement waste site removal actions	3/31/2016		3/31/2016	On Schedule (Tentative Agreement)
M-037-11	Complete Closure Requirements for 216-B-3 and 216-S-10	9/30/2016		9/30/2016	At Risk (being renegotiated to September 20, 2021 as part of tentative agreement).

### SELF-PERFORMED WORK

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

### GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

# Section F

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



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

December 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

The 100K Characterization Wells Project packaged all waste in preparation for shipment to ERDF. The 100K AB Waste Sites Remediation Project completed excavation of 10 feet on three additional waste sites and will sample in January. In addition, the RCCC Transition status was presented to the Contractor Interface Board and the accelerated schedule status and Transition planning costs were submitted to RL. In addition, Plateau Remediation Contract (PRC) Modification 466 that increased the NTE for CO 289 Transfer of RCCC Scope to PRC, to \$2 million was received.

## EMS Objectives and Target Status

None currently identified.

## TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	0	5	N/A
Near-Misses	0	0	N/A

## KEY ACCOMPLISHMENTS

- 100K Characterization Wells:
  - o 116-KE-3 and UPR-100-K-1:
    - Packaged all waste in preparation for January 4, 2016 shipment to ERDF
- Area AB waste site remediation:
  - Completed remediation to 10' on three additional waste sites and will sample in January.
- Completed 18 Radiological Surveillances.
- RCCC Transition:
  - Presented Transition status and plan approach to the Contractor Interface Board.
  - Presented accelerated schedule status, Transition Planning costs, J.3 Implementation and key decisions to RL Site Manager.
  - Finalized 90 percent draft of Transition Plan and submitted for review.
  - Held "Meet and Greet" with the 324 Building dedicated staff.
  - Held deep dive briefings on Key Decisions, TPA milestones, ERDF, Waste Management and Transportation, Remaining Closure Operations.
  - Obtained PRC Modification 466 that increased the NTE for CO 289 Transfer of RCCC Scope to PRC, to \$2 million.

## MAJOR ISSUES

**Issue:**

**The current FY2016 RL-0041 baseline budget and funding to perform 100K AB Area waste site remediation is not sufficient to complete the entire scope. Funding is currently adequate to complete excavation of the next 39,000 tons. If additional funding is not received, work will stop prior to completion of the scope.**

**Corrective Action:**

Identify and assess the difference between the planned (baseline) and estimated actual tons of soil to be remediated to complete the scope. Reconcile the 100K waste site tonnage between the PRC contract and baseline and compare against information provided in Letter 13-PRO-0333, dated August 15, 2013 that established RL's 100K Area Waste Site Concept Implementation 100K Area Waste Site Concept. Work with RL to obtain agreement on the path forward for continued progress of AB waste site remediation, including increased funding and proposed budget changes.

**Status:**

Discussions initiated with RL in December regarding continued progress and additional funds needed. The project is currently researching the contract and baseline to identify delta in tonnage. A ROM estimate has been prepared that reflects remediation of the entire AB scope. A more detailed estimate will be prepared prior to providing a final recommendation on the path forward for the required budget increase.

## RISK MANAGEMENT STATUS

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

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
<b>RL-0041/WBS-041</b>										
<b>Explanation of major changes to the project monthly spotlight chart:</b> No major changes to the monthly spotlight chart in the month of <b>December</b> .										
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)										
No realized risks for the month of <b>December</b> .										
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No critical risks identified in the month of <b>December</b> .										
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)										
<b>Lifecycle Risk Triggers</b> (Risk could be realized at any point of the project)										
KBC-002: Subcontract Change Orders/Claims	Subcontracts for D4, soil remediation, and other field support services require revision based on discovery of changed conditions or completion requirements resulting in cost impacts and schedule delays.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Low (10% to 25%) <b>Worst Case Impacts:</b> \$1.5 million, 66 days			<b>Risk Trigger Metric:</b> Field condition changes, including but not limited to, the amount of waste containers provided for soil remediation on a daily basis. <b>Additional field changes include the need to excavate a greater amount of soil than planned to complete remediation.</b> <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <b>Mitigation Assessment:</b> Increase communication/interface continues between the Project and ERDF to obtain delivery of containers needed to achieve planned production rates for waste site remediation needed containers.  <b>In the month of December, an issue was identified with the baseline planning assumptions. It is anticipated that in January the project will identify and assess the difference between planned (baseline) and estimated actual tons of soil to be remediated to complete scope. Through this analysis, a baseline change request or a request to increase funds may be needed.</b>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of <b>December</b> .										

## PROJECT BASELINE PERFORMANCE

### Current Month

#### (\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	0.9	1.8	1.1	0.9	100%	0.7	37.9%

Numbers are rounded to the nearest \$0.1 million

#### CM Schedule Performance (+\$0.9M/+100%)

The positive schedule variance for the current month is primarily due to the continued acceleration of 100K Waste Sites AB remediation (\$641.2K) and the 100K Boreholes (\$117.1K). Nearly all 10 waste sites have been remediated to 10' and some in-process sampling has occurred. The 100K Boreholes activities for Leach Testing were completed during the month, which had been behind schedule.

#### CM Cost Performance (+\$0.7M/+37.9%)

The positive cost variance for the current month is largely contributed to an under-run in the 100K Waste Site Area AB account (\$341.2K) and Program Management (\$263.1K). Less labor resources have been required for both 100K Waste Sites AB and Program Management. Additionally, sampling costs are lagging for the In-Process sampling performed on the waste sites.

## 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	319.5	321.5	292.7	2.0	0.6%	28.8	8.9%	399.9	369.5	30.4

Numbers are rounded to the nearest \$0.1 million

#### CTD Schedule Performance (+\$2.0M/+0.6%)

The schedule variance is within reporting thresholds.

#### CTD Cost Performance (+\$28.8M/+8.9%)

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

#### Variance at Completion (+\$30.4M/+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	FY2016		
	Projected Funding	Spending Forecast	Spend Variance
RL-0041	15.1	20.8	(5.7)

Numbers are rounded to the nearest \$0.1 million.

### Funds/Variance Analysis:

The RL-0041 project funding is \$15.1 million for FY2016 and remains unchanged. The FYSF changed from \$14.1 million to \$20.8 million. This increase reflects continued remediation of the 100K AB Area wastes sites (currently in progress) over the FY2016 baseline value, but up to the total allowed tonnage limit authorized in the contract per the 100K Area Concept. Discussions are underway with RL to obtain the additional funding needed to continue the 100K Waste Site Area AB remediation in the latter half of the fiscal year.

### Critical Path Schedule

Critical Path Analysis can be provided upon request.

### Baseline Change Requests

BCR-041-16-006R0, *PBS RL-0041 Undistributed Budget Adjustments December 2015*

## MILESTONE STATUS

None currently identified.

## SELF-PERFORMED WORK

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

## GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

# Section G

## Fast Flux Test Facility Closure (RL-0042)



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

**December 2015**  
CHPRC-2015-12, 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 Argon Cover Gas Pressure Monitoring Calibrations
- Completed Annual Ignitable/Reactive waste inspection
- 400 Area Water Systems:
  - o Completed all monthly and weekly maintenance inspections.
  - o Completed repair/calibration of Tank Temperature Control System at T-58 and T-87
- Completed:
  - o 22 Preventive Maintenance (PM) activities.
  - o Four operational surveillances.
  - o Four radiological surveillances.

## MAJOR ISSUES

None currently identified.

## RISK MANAGEMENT STATUS

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

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

- Increased Confidence
- No Change
- Decreased Confidence

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

## 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	0.2	0.1	0.0	4.6%	0.1	36.4%

Numbers are rounded to the nearest \$0.1M

**CM Schedule Performance: (+\$0.0M/+4.6%)**

The schedule variance is within reporting thresholds.

**CM Cost Performance: (+\$0.1M/+36.4%)**

The cost variance is within reporting thresholds.

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

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	20.5	20.6	16.8	0.0	0.2%	3.8	18.3%	26.7	22.8	3.9

Numbers are rounded to the nearest \$0.1 million

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

The schedule variance is within reporting thresholds.

**CTD Cost Performance (+\$3.8M/+18.3%)**

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

**Variance at Completion (+\$3.9M/+14.8%)**

The Variance at Completion is within reporting thresholds.

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

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

RL-0042 FFTF Closure	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
RL-0042	3.3	1.8	1.5

Numbers are rounded to the nearest \$0.1 million

**Funds Analysis**

Projected Funding is unchanged from last month. The FYSF change for FY2016 from \$1.7 million to 1.8 million is insignificant for the month.

**Critical Path Schedule**

Critical path analysis is not applicable to this project. The remaining contract scope is performance of interim surveillance and maintenance activities pending facility disposition.

**Baseline Change Requests**

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.

# 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 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

INTEGRATED PROGRAM MANAGEMENT REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE													DOLLARS IN Dollars			PENDING UPDATE TO OMB No. 0704-0188		
<b>1. CONTRACTOR</b>				<b>2. CONTRACT</b>				<b>3. PROGRAM</b>				<b>4. REPORT PERIOD</b>						
a. NAME CH2M HILL Plateau Remediation Company				a. NAME Plateau Remediation Contract				a. NAME Plateau Remediation Contract				a. FROM (YYYYMMDD) 2015 / 11 / 23						
b. LOCATION (Address and ZIP Code) Richland, WA				b. NUMBER RL14788				b. PHASE				b. TO (YYYYMMDD) 2015 / 12 / 20						
c. TYPE CPAF				d. SHARE RATIO				c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18										
<b>5. CONTRACT DATA</b>																		
a. QUANTITY 1	b. NEGOTIATED COST 5,532,169	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 19,721	d. TARGET PROFIT/FEE 232,969	e. TARGET PRICE 5,765,138	f. ESTIMATED PRICE 5,592,861	g. CONTRACT CEILING 5,765,138	h. ESTIMATED CONTRACT CEILING 5,592,861	i. DATE OF OTB/OTS (YYYYMMDD)										
<b>6. ESTIMATED COST AT COMPLETION</b>						<b>7. AUTHORIZED CONTRACTOR REPRESENTATIVE</b>												
MANAGEMENT ESTIMATE AT COMPLETION (1)			CONTRACT BUDGET BASE (2)			VARIANCE (3)			a. NAME (Last, First, Middle Initial) Dickerson, Kala K				b. TITLE Prime Contract Manager					
a. BEST CASE 5,299,090									c. SIGNATURE				d. DATE SIGNED (YYYYMMDD) 10/25/2015					
b. WORST CASE 5,386,097																		
c. MOST LIKELY 5,359,892			5,551,890			191,998												
<b>8. PERFORMANCE DATA</b>																		
CAPN.PBS		CURRENT PERIOD				CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION					
ITEM (1)	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)								
RL-0011 Nuclear Mat Stab & Disp PFF	9,372	7,766	7,396	(1,606)	370	891,397	858,817	864,730	(32,580)	(5,913)	0	0	0	969,712	970,564	(852)		
RL-0012 SNF Stabilization & Disp	5,235	5,515	4,614	279	901	533,506	534,138	546,507	632	(12,370)	0	0	0	717,150	726,163	(9,013)		
RL-0013 Solid Waste Stab & Disp	8,808	7,464	6,280	(1,344)	1,184	1,006,826	1,008,062	947,394	1,235	60,668	0	0	0	1,335,633	1,254,346	81,287		
RL-0030 Soil & Water Rem-Grndwtr/Vadose	9,303	8,383	7,667	(919)	716	1,181,847	1,172,776	1,152,983	(9,071)	19,793	0	0	0	1,566,913	1,515,663	51,250		
RL-0040 Nuc Fac D&D - Remainder Hanfrd	1,136	1,042	1,181	(94)	(139)	406,119	405,936	374,342	(183)	31,594	0	0	0	469,520	434,626	34,894		
RL-0041 Nuc Fac D&D - RC Closure Proj	910	1,820	1,131	910	689	319,505	321,504	292,736	2,000	28,769	0	0	0	398,374	367,939	30,434		
RL-0042 Nuc Fac D&D - FFTF Proj	146	153	97	7	56	20,544	20,583	16,807	39	3,776	0	0	0	26,694	22,751	3,943		
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
d. UNDISTRIBUTED BUDGET													7,039	7,039	0			
e. SUBTOTAL	34,910	32,143	28,366	(2,768)	3,776	4,359,744	4,321,815	4,195,500	(37,929)	126,316	0	0	0	5,491,035	5,299,090	191,944		
f. MANAGEMENT RESERVE													60,801					
g. TOTAL	34,910	32,143	28,366	(2,768)	3,776	4,359,744	4,321,815	4,195,500	(37,929)	126,316	0	0	0	5,551,836				
<b>9. RECONCILIATION TO CONTRACT BUDGET BASELINE</b>																		
a. VARIANCE ADJUSTMENT																		
b. TOTAL CONTRACT VARIANCE																		
										(37,929)	126,316			5,551,836	5,299,090	252,746		

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

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

DOLLARS IN Dollars

PENDING UPDATE TO  
OMB No. 0704-0188

<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>		<b>3. PROGRAM</b>			<b>4. REPORT PERIOD</b>		
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract			a. FROM (YYYYMMDD) 2015 / 11 / 23		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2015 / 12 / 20		
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO X YES (YYYYMMDD) 2009 / 09 / 18					

WBS.Resp Org Group WBS.Resp Org Code  ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		ADJUSTMENTS			BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)			
34 - Env Program & Strategic Plng	756	598	538	(158)	60	58,587	58,282	54,154	550	4,128	0	0	0	83,205	80,133	3,072
35 - Business Services	0	0	0	0	0	472,524	472,524	448,488	0	24,036	0	0	0	472,524	448,488	24,036
36 - Prime Contract & Proj Integr	210	210	126	0	85	2,773	2,773	1,375	0	1,398	0	0	0	8,602	6,837	1,765
38 - Project Technical Services	0	0	0	0	0	0	0	0	0	(0)	0	0	0	0	0	(0)
3B - PFP Closure Project	9,325	7,719	7,386	2,578	6,941	804,663	772,082	785,489	(32,580)	(13,407)	0	0	0	882,453	891,042	(8,589)
3C - Waste & Fuels Management Project	8,778	7,434	6,255	2,480	4,077	898,822	900,057	839,581	1,235	60,476	0	0	0	1,226,758	1,145,638	81,120
3D - Soil & Groundwater Remediation	8,495	7,733	7,083	(559)	1,581	1,024,231	1,015,464	993,467	(8,767)	21,997	0	0	0	1,382,856	1,328,439	54,417
3G - K Basin Oper & Plateau Remediation Project	7,346	8,448	6,977	563	(1,739)	1,098,144	1,100,632	1,072,946	2,488	27,687	0	0	0	1,427,597	1,391,474	36,123
<b>b. COST OF MONEY</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>c. GENERAL AND ADMINISTRATIVE</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>d. UNDISTRIBUTED BUDGET</b>														7,039	7,039	(0)
<b>e. SUBTOTAL (Performance Measurement Baseline)</b>	34,910	32,143	28,366	(2,768)	3,776	4,359,744	4,321,815	4,195,500	(37,929)	126,316	0	0	0	5,491,035	5,299,091	191,944
<b>f. MANAGEMENT RESERVE</b>														60,801		
<b>g. TOTAL</b>	34,910	32,143	28,366	(2,768)	3,776	4,359,744	4,321,815	4,195,500	(37,929)	126,316	0	0	0	5,551,836		

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE															Form Approved OMB No. 0704-0188					
DOLLARS IN THOUSANDS																				
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA					2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:					3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009					4. REPORT PERIOD a. FROM: 2015/11/23 b. TO: 2015/12/20					
5. CONTRACT DATA																				
a. ORIGINAL NEGOTIATED COST 4,312,366					b. NEGOTIATED CONTRACT CHANGE \$1,219,803		c. CURRENT NEGOTIATED COST (A + B) \$5,532,169		d. ESTIMATED COST AUTH UNPRICED WORK \$19,721		e. CONTRACT BUDGET BASE (C + D) \$5,551,890			f. TOTAL ALLOCATED BUDGET \$5,551,836		g. DIFFERENCE (E - F) \$54				
h. CONTRACT START DATE 6/19/2008					i. DEFINITIZATION DATE 6/19/2008			j. PLANNED COMPL DATE 9/30/2018		k. CONT COMPLETION DATE 9/30/2018			l. EST COMPLETION DATE 9/30/2018							
6. PERFORMANCE DATA																				
ITEM (1)			BCWS CUM TO DATE (2)		BCWS FOR REPORT PERIOD (3)		BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)										UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)		
							SIX MONTH FORECAST						FY09-13	FY14	FY15	FY16			FY17	FY18
							+1 Jan-16 (4)	+2 Feb-16 (5)	+3 Mar-16 (6)	+4 Apr-16 (7)	+5 May-16 (8)	+6 Jun-16 (9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
a. PM BASELINE (BEGIN OF PERIOD)			4,324,834		34,283		41,696	34,916	45,761	35,433	32,428	30,938	3,391,477	391,653	471,323	443,495	416,230	363,849	9,566	5,487,593
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																				
BCR-013-16-004R0 - Definitization of CO #277, Super 7A Trailer																533				533
BCR-013-16-009R0 - CO #263, ERDF Leachate Transfer Pipeline Construction																800				800
BCR-013-16-010R0 - WESF Stack Monitoring Planning Package to Detailed Work Package																(248)				(248)
BCR-013-16-011R0 - Definitization of CO #274, CWC Box NDA Campaign																239				239
BCR-013-16-012R0 - Environmental and Regulatory Enhancements																1,476	(1,476)			0
BCR-013-16-013R0 - Re-plan Ecology Agreed Order Tasks																0				0
BCR-030-16-013R0 - Incorporate TPA M-016-193, Complete Remedial Design Investigation of SE Chromium Plume																0				0
BCR-030-16-014R0 - CO #299, 200W P&T Systems Membrane Bioreactor Cassette Additions																1,444				1,444
BCR-030-16-015R0 - Definitization of CO #272, Build and Implement Portable Remediation Treatment																285				285
BCR-030-16-016R0 - Definitization of CO#292, 200 SW-2 RIFS Aerial Radiation Survey																161				161
BCR-030-16-017R0 - CO #266, 200-BP-5 OU Construction and O&M of Transfer Pipelines																2,636				2,636
BCR-PRC-16-017R0 - 200-CW-5 and 200-PW-136 RDRAWP Realized Risk																120				120
BCR-041-16-006R0 - PBS RL-041 Undistributed Budget Adjustments December 2015																			1,000	1,000
BCR-PRC-16-018R0 - Undistributed Budget Adjustments December 2015																			(3,528)	(3,528)
c. PM BASELINE (END OF PERIOD)			4,359,744		34,910		43,019	36,164	46,911	36,231	33,158	31,337	3,391,477	391,653	471,323	450,940	416,230	362,373	7,038	5,491,034
7. MANAGEMENT RESERVE																				60,801
8. TOTAL																				5,551,836

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					
1. CONTRACTOR			2. CONTRACT				3. PROGRAM			4. REPORT PERIOD					
a. NAME			a. NAME				a. NAME			a. FROM (YYYYMMDD)					
CH2M HILL Plateau Remediation Company			Plateau Remediation Contract				Plateau Remediation Contract			2015 / 11 / 23					
b. LOCATION (Address and ZIP Code)			b. NUMBER				b. PHASE			b. TO (YYYYMMDD)					
Richland, WA			RL14788							2015 / 12 / 20					
			c. TYPE		d. SHARE RATIO		c. EVMS ACCEPTANCE								
			CPAF				YES 2009 / 09 / 18								
5. PERFORMANCE DATA															
Organizational Breakdown Structure (OBS)  (1)	ACTUAL CURRENT PERIOD  (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)									AT COMPLETION  (15)			
			SIX MONTH FORECAST BY MONTH (Enter names of months)										REMAIN FY2016 (10)	FY2017 (11)	FY2018 (12)
			+1 JAN 2016 (4)	+2 FEB 2016 (5)	+3 MAR 2016 (6)	+4 APR 2016 (7)	+5 MAY 2016 (8)	+6 JUN 2016 (9)							
300 - Office of the President	10	527	6	5	5	5	5	5	5	5	16	63	63	702	
303 - Internal Audit	5	376	5	5	5	5	5	5	5	5	14	60	60	540	
304 - General Counsel	4	356	4	4	4	4	4	4	4	5	15	60	60	516	
31 - Communications	8	841	8	8	8	8	8	8	8	8	25	108	108	1,132	
32 - Safety Health Security & Quality	55	6,041	62	62	62	62	62	62	62	62	183	774	775	8,142	
34 - Env Program & Strategic Plng	44	3,965	46	44	43	45	43	43	43	43	125	607	600	5,561	
35 - Business Services	55	6,433	61	62	63	63	63	63	63	63	188	759	761	8,517	
36 - Prime Contract & Proj Integr	50	3,814	59	59	59	59	59	59	59	59	175	652	643	5,638	
38 - Project Technical Services	27	4,933	36	36	36	36	36	36	36	36	106	433	427	6,111	
3B - PFP Closure Project	358	42,287	403	377	325	230	269	274	274	274	676	621	-	45,463	
3C - Waste & Fuels Management Project	314	42,635	317	293	286	292	292	292	291	291	897	3,680	3,601	52,642	
3D - Soil & Groundwater Remediation	290	29,976	280	302	326	319	311	290	290	290	810	3,562	3,963	40,167	
3G - KBO&PR Project	285	40,509	325	348	351	347	331	315	315	315	977	3,855	3,510	50,880	
Grand Totals	1,506	182,693	1,612	1,604	1,574	1,476	1,487	1,455	1,455	1,455	4,207	15,234	14,571	226,011	

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

CLASSIFICATION (When Filled In)									
CONTRACT PERFORMANCE REPORT FORMAT 5 - EXPLANATIONS AND PROBLEM ANALYSES							FORM APPROVED OMB No. 0704-0188		
1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD			
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract		a. FROM (YYYY/MM/DD)  2015/11/23			
b. LOCATION (Address and ZIP Code)  Richland, WA 99354		b. NUMBER DE-AC06-08RL14788		b. PHASE Base		b. TO (YYYY/MM/DD)  2015/12/20			
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE 2009/09/18 NO YES X					
	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Current:	34,910	32,143	28,366	(2,768)	-7.9%	3,776	11.7%	0.92	1.13
Cumulative:	4,359,744	4,321,815	4,195,500	(37,929)	-0.9%	126,316	2.9%	0.99	1.03
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	5,491,035	5,299,091	191,944	3.5%	1.06				
<b>Explanation of Variance/Description of Problem:</b>									
<p><b>Current Period Schedule Variance:</b> The current month unfavorable schedule variance is primarily due to RL-0011, PFP resources being reassigned to complete higher priority work (i.e. PRF D&amp;D, Insitu Glovebox removal), resulting in fewer resources available to perform work as planned. The temporary stop work at PFP on high hazard work has also contributed to the schedule variance.</p> <p><b>Current Period Cost Variance:</b> The current month favorable cost variance is attributed to RL-0013 implementation of planned efficiencies such as resource sharing of multiple scopes of work.</p> <p><b>Cumulative Schedule Variance:</b> The variance is within reporting thresholds.</p> <p><b>Cumulative Cost Variance:</b> The variance is within reporting thresholds.</p>									
<b>Impact:</b>									
<p><b>Current Period Schedule:</b> For PFP, If schedule efficiencies are not realized through characterization efforts, additional resources will be required to complete the work scope. This will increase the ETC and could possibly delay the ready for demolition milestone. No other significant impact overall, as the lifecycle EAC reflects these changes.</p> <p><b>Current Period Cost:</b> No significant impact overall, as the lifecycle EAC reflects these changes.</p> <p><b>Cumulative Schedule:</b> N/A</p> <p><b>Cumulative Cost:</b> N/A</p>									
<b>Corrective Action:</b>									
<p><b>Current Period Schedule:</b> Preparations have been delayed due to team assignments associated with PRF canyon cleanup efforts and 234-5Z process vacuum piping and transfer line removal efforts. Residual liquid draining and drain line grout preparations were scheduled to begin in June. However, the team scheduled to initiate drain line prep work was reassigned to support PRF MT glovebox, bulk area cleanout, and most recently canyon cleanup efforts. This will delay the completion of drain line remediation as the team is not expected to transition to the drain lines in 234-5Z until February, 2016. It is not anticipated that the delay in the assignment of the team to support the drain line scope of work will impact the ready for demolition date for 234-5Z of July, 2016. Schedule adjustments have been incorporated into the EAC accordingly.</p> <p><b>Current Period Cost:</b> EAC has been adjusted accordingly.</p> <p><b>Cumulative Schedule:</b> N/A</p> <p><b>Cumulative Cost:</b> N/A</p>									
<b>Monthly Summary</b> (to include technical causes of VARs, Impacts, and Corrective Action(s):									
<p>CHPRC continues to track completion of contract scope within budget and is currently projecting a Variance at Completion of \$191.9 million with \$60.8 million of Management Reserve for a total positive variance of \$252.7 million. For December, the project was 7.9 percent behind schedule and 11.7 percent under planned cost. CTD, the project was 0.9 percent behind schedule and 2.9 percent under planned cost. No other specific Corrective Actions are planned at this time. There were no significant BCRs in the period that impacted the PMB. Additionally, revisions were made to Undistributed Budget (UB) via BCR-PRC-16-018R0 - <i>Undistributed Budget Adjustments December 2015</i> (details of changes listed below).</p>									
<b>Contractually Required Cost, Schedule, EAC variance, Management Reserve Use</b>									
<p>Variance in Performance BAC and EAC: The variance at complete (VAC) between the BAC and EAC this month is a +\$191.9 million, +3.5% and is within reporting thresholds.</p>									

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

Format 1 and 3 Contract Data:		Contract Price Adjustments	
CPs - In Process			
	Total Authorized Unpriced Work		\$19,721
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)			
	Total Negotiated Cost Changes		-
	<b>Grand Total Adjustments</b>		<b>\$19,721</b>

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

**MR Utilization**

BCR Number	Title	Fiscal Year	MR
PCR-PRC-16-017R0	<i>200-CW-5 and 200-PW-136 RDRAWP Realized Risk</i>	2015 - 2018	\$-120K
BCR-013-16-010R0	<i>WESF Stack Monitoring Planning Package to Detailed Work Package</i>	2015 - 2018	\$248K

Overall, there was an increase of \$128K to Management Reserve during December.

**Fee Activity**

BCR Number	Title	Fiscal Year	Fee
BCR-013-16-011R0	<i>Definitization of CO #274, CWC Box NDA Campaign</i>	2015 - 2018	\$20K
BCR-013-16-004R0	<i>Definitization of CO #277, Super 7A Trailer</i>	2015 - 2018	\$10K
BCR-030-16-015R0	<i>Definitization of CO #272, Build and Implement Portable Remediation Treatment</i>	2015 - 2018	\$22K
BCR-030-16-016R0	<i>Definitization of CO#292, 200 SW-2 RIFS Aerial Radiation Survey</i>	2015 - 2018	\$8K

Overall, there was an increase of \$61K to Fee during December.

**UB Activity**

BCR Number	Title	Fiscal Year	UB
BCR-041-16-006R0	<i>PBS RL-041 Undistributed Budget Adjustments December 2015</i>	2015 - 2018	\$1,000K
BCR-PRC-16-018R0	<i>Undistributed Budget Adjustments December 2015</i>	2015 - 2018	\$-3,528K

The Undistributed Budget decreased by \$2,528K for an overall increase to the Performance Measurement Baseline of \$3,441K 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> 1/14/2016	<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-2015-12, 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

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

## PROGRAM SUMMARY

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

### EMS Objectives and Target Status (draft)

Objective #	Objective	Target	Due Date	Status
16-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 82 percent by compressing occupancy and vacating underutilized facilities. Vacated/unoccupied facilities declared unusable and designated inactive placed in Care Taker System.	9/30/16	0%
16-EMS-ADMIN-OB2-T1	Maximize the acquisition and use of environmentally preferable products in the conduct of operations.	Establish/utilize green catalogs to maximum extent for products beyond office supply purchases on the web site.	10/9/16*	0%
16-EMS-ADMIN-OB3-T1	Energy and natural resource conservation.	Establish electronic signature system for contracts using Adobe Acrobat.	9/30/16	25%
16-EMS-PTS-OB1-T1	Reduce the potential generation and release of toxic, hazardous, and non-regulated chemical materials to the environment, evaluate for compliance with universal waste and other recycling requirements, and identify opportunities for waste reduction.	Monitor and evaluate spill prevention program and existing techniques to reduce and/or eliminate spills to the environment by surveillances, on-going training.	9/30/16	26%
16-EMS-PTS-OB2-T1	Increase chemical management oversight of subcontractors and PTS operations.	Increase chemical management oversight of subcontracts, evaluate chemical procurement methods, identify expired chemicals, track, and properly dispose of expired chemicals. Perform quarterly assessment on chemical inventory locations.	9/30/16	12%

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

## TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	1	8	<ul style="list-style-type: none"> <li>12/7/2015 - Worker reacted to fumes with a cough and chest pain while conducting a combustible control surveillance. (23892)</li> </ul>
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 was one reported injury during the month of December.
  - o Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
    - Continued support of site-wide standards committees and site-wide steering committees. DOE-0346, *Hanford Site Fall Protection Program*, is pending implementation of Revision 1A. DOE-0344, *Hanford Site Excavation, Trenching and Shoring Procedure*, in being routed for approval signatures; implementation pending. DOE-0352, *Hanford Site Respiratory Protection Program*) is going through the revision process at this time.
    - Continued implementation of the Chronic Beryllium Disease Prevention Program (CBDPP) Revision 2A. Beryllium assessments have been completed on 1095 CHPRC facilities. Beryllium characterizations have been completed on 749 CHPRC facilities.
    - Revisions to CBDPP Revision 3 has been completed and the document has been routed for signature at RL, due mid-February.
    - Continued to provide support to PFP for respiratory protection issues and resolution of the compressed breathing air issues. A request for variance has been submitted to RL following the 10 CFR 851 variance process for using a harness that was not NIOSH tested with the original Mine Safety Appliances (MSA) breathing system.
    - Continued to work with Sample Management in resolving issues with the handling and shipping of Industrial Hygiene (IH) samples.
    - Continued support to all projects for Oversight of Confined Space work activities.
    - Support to all projects for Fall Protection Program requirements and Fall Protection Work Permit reviews.
    - Provided additional confined space training/briefings for KBO&PR, and PTS, and provided support to all projects to approve additional competent/qualified personnel for DOE-0360 Revision 1, *Confined Space*.
    - Provided support to S&GRP for ergonomic evaluation of workstations for shipping and receiving activities.
    - Provided support to PFP, W&FMP, and KBO&PRS for asbestos characterization activities.
    - Provided support to W&FMP for lead removal of surfacing material at CWC.

- Provided support to PFP for beryllium characterization activities.
- Continued support to PTS for the development of an approved Fall Protection Work Permit (FPWP) for in-basin work.
- Provided support to W&FMP in the development of FPWP for WESF roof repair activities.
- Provided support to the PFP Cause Evaluation for the identified emerging trend of injuries and radiological issues.
- Completed the VPP Self-Assessment and the report is being finalized.
- o Radiological Control accomplishments:
  - Completed Radiologically Controlled Vehicles (RCV) Work Site Assessment.
  - Initiated Work Site Assessment of the radiological clearance process at PFP; field work completed.
  - Continued implementation of Survey Simple.
  - Reviewed and approved Technical Evaluations for FFTF, T-Plant, and 105KW (STP).
  - Benchmarked HEPA vacuum controls at other nuclear sites.
  - Supported Hazard Review Board (HRB) and oversight for PRF Canyon entries.
  - Continued to support RCCC transition planning.
- o Nuclear Operations Support & Compliance accomplishments:
  - Safety Basis documents and letters transmitted to RL include:
    - Letter, CHPRC-1504169.1, dated December 2, 2015, *Transmittal of the 2015 Annual Update to the B Plant Documented Safety Analysis, HNF-14804, Revision 6, and the Unreviewed Safety Question Evaluation Summary.*
    - Letter, CHPRC-1505104, dated December 14, 2015, *CHPRC Submittal of the Plutonium Finishing Plant Documented Safety Analysis, Revision 13, and the Plutonium Finishing Plant Technical Safety Requirements, Revision 13, for RL Review and Approval.*
    - Letter, CHPRC-1505630, dated December 28, 2015, *Transmittal of HNF-58818, Revision 0, Documented Safety Analysis for the 216-Z-9 Waste Storage Crib Facility, and HNF-59125, Revision 0, 216-Z-9 Waste Storage Crib Facility Technical Safety Requirements.*
    - Letter, CHPRC-1503045.1, dated December 29, 2015, *Transmittal of the Canister Storage Building 2015 Safety Basis Annual Update, the Annual Unreviewed Safety Question Report, and the List of Safety Basis Documents.*
  - Document approval received from RL:
    - Letter, 16-NSD-011\_RL, dated December 14, 2015, *CH2M HILL Plateau Remediation Company (CHPRC) Criticality Safety Program (CSP) Description Document, PRC-NS-00004, Revision 3, Approval.*
  - Criticality Safety
    - Three Criticality Safety Evaluation Reports are being finalized.
  - Transportation Safety
    - Received RL approval of CHPRC-01186, *Standard Waste Box Generic Tie down to Transporter.*
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
  - 201 Condition Reports (CRs) were screened:
    - Two Significant issues identified.
    - No Adverse issues identified.
    - 95 Track until Fixed (TUF) issues identified.
    - 37 Trend Only (TO) items identified.
    - 62 Opportunity for Improvement (OFI) items identified.
    - Five Screen Out.
  - 176 CRs administratively closed.

- 332 CR actions administratively closed.
- Provided full-time support to PFP in Issues Management, including cause evaluation and Occurrence Reporting.
- Transmitted two Occurrence Reporting and Processing System (ORPS) notification reports for PFP: EM-RL—CPRC-PFP-2015-0017, *Low Levels of Contamination Discovered on Vortex Coolers and Interior of an Exhaust Hose*; EM-RL—CPRC-PFP-2015-0018, *Identification of Contamination – Door 610*.
- Coordinated recurring monthly DNFSB, STP and PFP status conference calls.
- Continued support and coordination for an upcoming conference call with the DNFSB to discuss whether the final design for the WESF stabilization and ventilation project is consistent with requirements in DOE O 420.1B, *Facility Safety*. The review has been scheduled to begin Tuesday, March 2, 2016.
- Continued support and coordination for the upcoming DNFSB review of the current safety posture of the 202-S (REDOX) and 222-S facilities for a potential seismically-induced collapse of the REDOX facility roof and subsequent radiological release. The review has been scheduled to begin Tuesday, March 2, 2016.
- Ten documents were provided in response to DNFSB requests for information.
- One internal Lessons learned was submitted to OPEXShare in December 2015; 2015-SHS&Q-LL-0001, *Facility Safety Inspections Not Performed*.
- Provided Course 600082, *Responsible Manager, Issues Management*, to 14 employees
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
  - Continued Analysis of the FY2015 Safety Culture Survey data results.
  - Finalized Draft FY2016 Performance Objectives, Measures, and Commitments for ESRB presentation and approval.
  - Completed in-field activities and issued final report for 10 CFR 835 Subpart K, Design and Control.
  - Provided specific mentoring and feedback to assessors and responsible managers that conducted management assessments.
  - Supported the Plutonium Finishing Plant Documented Safety Analysis Revision 12 Implementation Verification Review.
  - Completed the Management Assessment for Fiscal Year 2015 ISMS Effectiveness Declaration SHS&Q-2016-MA-16476.
  - Continued work on the revision of the Integrated Safety Management System Description (ISMSD).
  - Met with Project Assessment Coordinators (PAC) to solicit feedback and continue development of the Assessment Workshop concept.
  - Developed outline agenda for the Assessment Workshop detailing both presentation topics and workshop activities.
  - Continued support of K-Basin Engineering in the development of a technical basis for what action should be taken with historical Cold Vacuum Drying Facility data files.
  - Supported the Soils & Ground Water organization in evaluation of the calibration methods used for Geophysical Logging equipment.
  - Completed support to Chief Information Officers (CIO) Office & Lockheed Martin Service, Inc. (LMSI) in the review and determination of records as being Office of Civilian Radioactive Waste Management (OCRWM).
  - The Quality Systems organization completed eight surveillances covering the areas of procurement, material control, Sludge Transportation and Storage Container (STSC) first article acceptance and OCRWM corrective actions.

- o Fire Protection accomplishments:
  - One new Fire Protection Engineer started in December, he meets all qualification requirements and is working on his Hanford/CHPRC qualification cards for both Site Engineer and Qualified Fire Protection Engineer.
  - The two adverse Condition Reports regarding Fire Protection Contract Compliance are nearly complete. The remaining actions for both are the effectiveness reviews.
  - Procedure updates are ongoing to improve the quality and ensure compliance with requirements.
  - TSR Surveillances:
    - SWOC
      - o 2X-15-7356, LLBG 3 month Combustible Surveillance
      - o W1-15-07371 - Quarterly WRAP Combustible fire surveillance
      - o W1-15-07370 – 1 Year Key Assumption Assessment surveillance
    - PFP
      - o ZAP-000-029, Checklist 2, Monthly 1 (TSR)
      - o ZAP-000-029, Checklist 3, Bi-Weekly/Monthly 3 (TSR)
      - o ZAP-000-029, Checklist 4, Weekly Fire Loading 4 (TSR)
      - o Fire Sprinkler Deactivation Areas 1 (Some rooms are TSR)
      - o FS Supply Valves 1 (TSR)
  - No Facility Fire Protection Assessments were completed in December.
  - The assessments for B-Plant may have to be scheduled in 2016 due to access limitations.
  - Fire Hazard Analysis (FHA):
    - The 105KW Annex Preliminary FHA is in final review after comments have been incorporated.
    - The T Plant FHA is being updated based upon the initial round of comments. The comment period was extended to allow additional comments due to the length of the document.
  - Other Fire Protection Items:
    - Training is being developed for Facility and Building Managers in regards to weekly and monthly visual inspections conducted at the facility level.
    - Meetings have been held to improve IT&M issues between CHPRC and MSA Water Utilities.
    - An Acceptance Test Procedure was developed for the 105KW Modified Annex fire alarm and sprinkler system.
    - Fire Protection has been working with Engineered Container Retrieval and Transfer System (ECRTS) and T Plant to assess the fire safety issues associated with entry into T Plant Canyon.
- Status of SHS&Q Focus Areas:
  - o **Issue:** Beryllium (Be) program assessment findings from DOE-HQ, Office of Safety, Health and Security Independent Oversight Inspection report.
  - o **Status:** Continued implementation of Revision 2A across CHPRC. Comment resolution is complete for Revision 3 and is being routed for signature.
  - o **Action:** Beryllium (Be) facility assessments and characterization continues as scheduled. Beryllium facility assessments have been completed on 1095 CHPRC facilities.
  - o **Issue:** Accident & Injury Reduction.
  - o **Status:** Continue investigating recordable, DART, and first aid injuries to determine cause, prevention, reduction, to prevent recurrence.
  - o **Action:** Continued to interface with project personnel, supporting EZAC and project safety meetings for continued focus on injury prevention. Recordable injury trend across CHPRC has

improved, but continued focus is necessary. Projects have identified and are implementing additional actions, which are resulting in reducing injuries and first aids.

- o **Issue:** PFP Value Engineering (VE) Initiatives Path Forward.
- o **Status:** Supporting PFP with three additional OS&IH personnel and three additional RadCon personnel, all from the SHS&Q Central group.
- o **Action:** Supporting PFP initiatives, supplied breathing air system issues; radiological & safety trends, outside limited area implementation, and DSA Revision 12 implementation and J plan waste path forward.
- o **Issue:** Fire Protection program weaknesses.
- o **Status:** Program weaknesses are being identified and Corrective Actions are underway to improve program. Additional personnel resources have been hired to support projects.
- o **Action:** Working with MSA to work off CHPRC back log items on the MSA IT&M log and to improve MSA HFD support to CHPRC projects. Working with CHPRC projects to schedule and perform back log of facility fire protection assessments.

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

### **Environmental Protection**

- **Compliance Status**

- o Received an As Low as Reasonably Achievable Control Technology approval from the Washington Department of Health (WDOH) that allows for preliminary construction activities for the ventilation upgrade project to proceed at the Waste Encapsulation and Storage Facility, pending WDOH's approval of the full license for the project.
- o Efforts continue to support RL and Ecology in preparation of the Revision 9 permit renewal for the Hanford Facility RCRA Permit. A discussion was held with Ecology on security and Part A permit form needs for the renewal, including a review of Ecology's list of identified deficiencies in related documentation for the TSD units.
- o Worked with RL and WDOH in defining activities needed to qualify continuous sampling of the Canister Storage Building's stack at flow rates different than the original qualified rates. This is needed to address and resolve WDOH's identified High Priority Violation for sampling outside the qualified range. Some stack velocity measurements will need to be taken this winter.
- o Support to PFP continued in the area of compliance with National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos standards. This includes development of a template for required thorough asbestos inspection reports in support of identification and characterization of asbestos containing materials. Additionally, reviewed the contingency plan developed for addressing situations where asbestos cannot be removed prior to demolition.
- o A full draft of a comprehensive asbestos procedure for compliance with NESHAP was completed and will be put out for formal CHPRC review in January.
- o Coordinated preparation of CHPRC input to several regulatory required reports, including the RCRA Land Disposal Restrictions report, Annual Dangerous Waste Report, and Emergency Planning and Community Right-to-Know Act report.

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

- **Assessment Program**

- o Completed an assessment of CHPRC equipment and material laydown areas to evaluate contractor performance in properly managing chemical product and waste materials. The assessment resulted in 35 issues that were entered into the CRRS. This included 19 findings, 14 Opportunities for Improvement and 2 noteworthy practices. The scope of the assessment reviewed 33 areas deemed as lay-down areas owned by CHPRC.
- o Completed an evaluation of PUREX Nuclear Control Operator responsibilities in performing inspections of waste containers as a follow up action from the Hanford Site Clean Sweep

Assessment conducted earlier this year. This assessment found no additional issues or concerns with the performance of waste container inspections.

### **Business Services**

- **Acquisition Planning:**
  - o Developed a truncated statement of work to be used in conjunction with tasks issued for work performed in the 100K area under the NQA-1 Construction Basic Ordering Agreements.
  - o Developed an acquisition strategy for the STP to provide corrective maintenance/preventative maintenance services at the 100K Annex facility. This fixed price construction work will provide maintenance services on the Annex facility throughout start-up and testing prior to turnover to operations in FY2017.
  - o Developed a statement of work and acquisition strategy for procurement of a specialized waste container for the T-Plant construction forces. This specialized package will be used for safe transport and disposal of highly radioactive equipment that is being removed from T-Plant.
  - o Completed the draft extent of condition and transition item checklists for the RCCC transition activities for Business Services.
  - o Drafted three business case analysis for RCCC transition activities for Motor Carrier Services, Fleet Maintenance, and Crane & Rigging Services.
  - o Completed the draft SOW revision, developed the estimated costs, and developed the acquisition strategy for supplying chemicals at the 200 West Pump and Water Treatment Facility.
  - o Developed the acquisition strategy for existing staff augmentation personnel whose scope may be part of the RCCC transition activity.
- **Facilities & Property Management (F&PM):**
  - o Completed the 2015 CHPRC property inventory with the CHPRC property representatives. F&PM had completed locating 99.71 percent of 3,407 items and 99.97 percent of the \$151,401,243.60 value through December 2015. Seven LDDR's valued at \$18K total will be processed.
  - o FY2015 KPMG property system audit results were forwarded from RL. System generally compliant. Six findings and five observations were noted. Corrective Action Plan formally requested from RL.
  - o Continued with the re-aligning of asset responsibilities and assignments as a result of the split in the DWF&RS organization to KBO&PR and W&FMP. Re-alignment of assets and assignments complete for DWF&RS. 90 percent complete for separation of S&M to KBO&PR. New organizational codes established for personnel and assignments.
  - o Working on transferring MO2102 back from WRPS to CHPRC at PFP. Waiting on WRPS to sign SF-122 to complete transfer in SAMS.
  - o Efforts continued on installing two self-contained showers at PFP, two self-contained facilities at 100K, and three facilities at B-Plant.
- **Finance:**
  - o Continued to support KPMG requests for data related to the ongoing FY2013-FY2014 incurred cost audits.
  - o December month end completed with no suspensions.
  - o Rolled out training to Managers of upcoming Time Information System (TIS) updates that will require non-exempt and bargaining unit employees to log-in and "save" at the beginning of every shift, and exempt employees to log-in and save and the beginning of paid overtime shifts. Policy becomes a requirement January 4, 2016.
- **Labor Relations:**
  - o Awaiting arbitrator's award (anticipated in February) PRC-014-076 in regards to shift differential pay heard on November 18, 2015.

- o Arbitration originally scheduled for December 15-16, 2015, to address HAMTC's General Council grievance in regards to D&D activities at PFP has been postponed and parties are in discussions.
- o The union withdrew one grievance PRC-015-010 and placed a hold on striking panel for PRC-015-017. One new grievance (PRC-015-028) was requested by the Union to proceed to arbitration this reporting period.
- o Three grievances (PRC-014-113, PRC-014-126, & PRC-015-003) will be combined and heard during arbitration scheduled January 20, 2016. These grievances deal with the offsite purchasing of pipe spools.
- **Procurement:**
  - o Awarded/amended 119 contracts with a total value of \$7.2 million. Additionally, awarded 87 new material Purchase Orders (PO) valued at \$456,789 to support ongoing project objectives.
  - o At the end of the first 87 months of the CHPRC project, procurement volume has been significant; \$2.3 billion in contract activity has been recorded with approximately 52.33 percent, or \$1.2 billion, in awards to small businesses. This includes 7,073 contract releases, 19,900 PO's, and 238,218 P-Card transactions.
  - o Contract 44438, Release 41 was awarded to DGR Grant on December 21, 2015. This is a firm fixed price contract to "Install Restroom and Shower Trailer at 100K". This award is valued at \$30,750.
  - o Contract 44438, Release 42 was awarded to DGR Grant on December 29, 2015. This is a firm fixed price contract to "Relocate MO-606 from 100-D to 200-E". This award is valued at \$23,000.
  - o Contract 54134-5 was a competitive award made on December 15, 2015, to Columbia Energy in the amount of \$129,997.00 for the design, fabricate, and certification of an IP-1 metal over pack.
  - o Contract 48767-3 was a noncompetitive award made on December 16, 2015, to Cascade Drilling in the amount of \$477,549.00 for Re-drill work on injection well C9521 at ZP-1.
  - o Contract 56189-5 was awarded to Holt Services on December 16, 2105. This contract is a firm fixed price for "The Installation of Four Replacement Wells in the 100-HR-3 (100-D) OU FY2016 Drilling Campaign". This award is valued at \$186,180.00.
  - o Contract 56189-6 was awarded to Holt Services on December 16, 2105. This contract is a firm fixed price for "The Installation of Three Replacement Wells in the 100-HR-3 (100-H) OU FY2016 Drilling Campaign". This award is valued at \$88,820.00.
  - o Contract 56189-7 was awarded to Holt Services on December 21, 2015. This contract is a firm fixed price for "Installation of Three Monitoring Wells in the 200-UP-1 OU FY2016 Drilling Campaign". This award is valued at \$625,000.00.
  - o Contract 56189-8 was awarded to Holt Services on December 22, 2015. This contract is a firm fixed price for "Installation of Four Monitoring Wells and Three Optional Wells - 200-UP-1 OU FY2016 Drilling Campaign". This award is valued at \$1,447,274.00.
  - o Contract 36883 Release 25 was awarded to Ojeda Business Ventures on December 29, 2015. This contract is a firm fixed price for the procurement of a modified tractor to perform radiological surveys. This award is valued at \$479,044.22.
  - o Contract 36883, Release 25 was awarded to Ojeda Business Services on December 29, 2015. This is a firm fixed price contract for "Modified Tractor for Radiological Surveys". The award value is \$479,044.22.
  - o Contract 57675, Release 2 was awarded to Babcock Services, Inc. This is a labor hour contract for a work activity planner. The award value is \$189,000.00.
  - o Contract 58474 was awarded to Steelman Associates, LTC. This a labor hour contract for Demolition Readiness Assessment Team Lead. The award value is \$70,000.

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

- **Contract Compliance and Change Management (CC&CM):**
  - o In December, CC&CM received and processed 12 contract modifications (numbers 456, 457, 460, and 463-471) from RL.
  - o The Correspondence Review Team received and determined the distribution for 64 incoming letters/documents. The Prime Contract Compliance Manager reviewed 37 outgoing correspondence packages.
  - o Transmitted RFS RF2050, Amendment 1, to RL for FY2016 Level of Effort Support to the Puget Sound Naval Shipyard.
  - o Submitted the following FY2015 Performance Measure Completion Package:
    - PM-11-02, *Demolish PFP Complex Facilities to Slab-On-Grad and Stabilize the Site for Surveillance and Maintenance.*
  - o Submitted the following FY2016 Performance Measure Completion Package:
    - PM-30-3-16, *Legacy Facilities Equipment Disposition.*
  - o Submitted the following FY2016 Performance Measure Partial Completion Package:
    - PM-00-2-16, *Facilitate initiation of on-demand cleanup scope as cost underruns are obtained or additional funding is identified.*
  - o Submitted three Notice of Change letters. One based on the direction to perform additional safeguards actions on selected material within the PFP Project, CHPRC-1505052, another was a reissue of the notification of potential impacts to the PFP Closure Project due to the chemical reaction in canyon, CHPRC-1504824, and a Notification of Change letter was issued based on additional requirements for startup of the PFP Project demolition, CHPRC-1505557.
  - o Continued RCCC Transition Planning:
    - Presented Transition status and plan approach to the Contractor Interface Board.
    - Presented the accelerated schedule status, Transition planning costs, SHS&Q Program gap analysis, J.3 Implementation, and key decisions to the RL Site Manager.
    - Completed the 60 percent draft of the Transition Plan. Finalized the 90-percent draft of the Transition Plan and provided to RL and WCH for review.
    - Reviewed the WCH Transition Plan and provided comments to WCH.
    - Finalized the CHPRC revised continuity of service procedure to allow consideration for affiliate employees on the RCCC contract that join the CHPRC team and provided to RL. Obtained RL advance approval.
    - Held a “Meet and Greet” with the 324 Building dedicated staff to acquaint them to CHPRC.
    - Received PRC Modification 466 with an increased NTE for CO 289, Transition of RCCC Scope CHPRC.
    - Issued second joint CHPRC/WCH Transition Bulletin.
    - Held deep dive briefings on Key Decisions, TPA milestones, HR, ERDF, Waste Management and Transportation, Remaining Closure Operations, and business case summary for Property and Facilities management.

### Change Proposal (CP) /REA Summary

CPs submitted on or ahead of due date	CPs submitted after the due date	REAs submitted	Supplemental Information submitted/ Tina Sweep	CPs Definitized on or ahead of 180-day metric	CPs Definitized after 180-day metric	Other Proposals/ REAs Definitized
1	0	0	4	3	1	1

- o Estimating & Program Support (ESS) provided the following support to Projects and Programs.
- o PFP:
  - Provided additional estimate basis information to the RL Technical Review Team for CO 297, *PFP Slab Removal Documentation*, on December 16, 2015.
- o KBO&PR:
  - Supported definitization of proposal PRO 1535, *Assignment of Unassigned Waste Sites in the Waste Information Data System Notice of Change*, on December 9, 2015. This proposal contained waste sites that were assigned to PBS’s RL-0011 (PFP), RL-0013 (Central Plateau), and RL-0041 (River Corridor).
- o W&FMP:
  - Supported definitization the following COs on the dates indicated:
    - CO 278, *Procure DOT Type 7A Large Shipping Container (Super 7A)*, on December 21, 2015.
    - CO 274, *CWC Box NDA Campaign*, on December 1, 2015.
    - CO 277, *Super 7A Trailer*, on December 1 2015.
- o S&GRP:
  - Supported definitization of CO 295, *200-IS-1 Geographic Interface Segmentation*, on December 21, 2015.
  - Submitted proposal PRO-1583, *Characterization of Shallow Soils at 200-DV-1 Operable Unit*, on December 16, 2015.
  - Provided additional estimate basis information to the RL Technical Review Team for CO 299, *200 West Pump & Treat System Membrane Bioreactor Cassette Additions*, on December 15, 2015.
    - Conducted TINA reviews for the following COs on the dates indicated: CO 293, *100-BC-5 RI FS Decisional Rewrite*, on December 10, 2015 and submitted the results to the RL CO on December 21, 2015.
    - CO 294, *100-KR-4 RI FS Decisional Rewrite*, on December 10, 2015.
- o PTS:
  - Provided a fair cost estimates in support of the procurement activities related to two mobile trailer installations at the 100K Area, and the relocation of a mobile office from the 100D Area to the 200 East Area.
- o ESS:
  - Sage Estimating and support vendor, EOS, and LMSI came to agreement on the best software configuration in Hanford’s environment. New production Virtual Servers were procured. The Estimating Administration performed cleanup activities in the Sage Archive Database in preparation for data migration after installation is complete. The version 14.2 installation in production is planned during January.
- **Earned Value Management System (EVMS) Compliance and Reporting:**
  - o Progress continued to be made on EVM Assessment Corrective Actions. As of month end, 54 of 68 actions had been completed (79 percent complete).
  - o An independent review on the adequacy of VARs in meeting RL and CHPRC requirements was completed by a Project Time & Cost SME and his comments provided to the responsible CAMs

and Project Control Directors/Managers. This effort is part of the continuing Corrective Actions to address RL's findings associated with deficient VARs and associate variance Corrective Actions as documented in the final report for DOE A-15-ESQ-PRC-001. Based on feedback from the SMEs review, the fiscal November VARs have demonstrated a significant improvement and CHPRC is in process of demonstrating closure of the finding.

- o During December, EVMS C&R facilitated and supported the processing of 17 BCRs. This high volume of BCRs in a month, which is projected to continue for the foreseeable future, is driven by changes in RL priorities. COs including BCRs to incorporate scope associated with CO NTE amounts and CO definitization, implementation of the STP CAP, and CHPRC self-initiated BCRs related to initiatives to improve the quality of baseline planning and reporting.
- o Continued to support RCCC Transition planning with emphases on RCCC EVMS data.
- o Efforts continued to create a compliance matrix to align with the recently developed EVMS Interpretation Handbook. Once completed, the Project Control System Description (PCSD) will be modified to align with the Handbook.
- o Efforts continued to develop computer based training for Accrual training, VAR training, and BCR training. Completion is targeted for early in CY2016.
- o Continued to lead CHPRC EVM training and Qualification initiative.
- **Information and Interface Management:**
  - **Interface Management**
    - o Interfaces (Technical, Administrative and Regulatory):
      - Attended Infrastructure Services and Alignment Plan (ISAP): Kickoff Meeting on December 22, 2015. Website population due February 5, 2016.
      - Completed FY2015 Annual Document Reviews of CHPRC Administrative Interface Agreements.
      - Provided WRPS with Steam Line Surveillance and Maintenance program information and cost estimates to support their impact analysis of potential incoming Steam Line Surveillance and Maintenance contract direction.
      - Facilitating MSA data request for a Long Term Water Usage forecast.
      - Completed collaborative effort with WRPS to remove and/or relocate up to 225 signs and T-posts around the A Farm to reduce the number of driving obstacles in the area. The majority of the signs were for Underground Radioactive Material Areas (URMAs), which were reposted to the perimeter and out of the traffic impact area.
      - Completed expeditious loan of two supplied air bottle carts from WRPS to support an emerging need at PFP. Turnaround time was within the day of the initial request.
    - o Annual Forecast of Services
      - Completed discussions with WRPS Vent and Balance Project team to improve forecasting process and communications.
      - No significant changes to FY2016 MSA forecast of services have been realized.
    - o Inter-Contractor Issue Resolution:
      - Attended weekly field interface and resource allocation meetings.
      - Participated in regular Interface Management leadership meetings with MSA and WRPS.
      - Participated in the December Contractor Interface Board meeting.
      - Facilitating discussions with WRPS regarding demolition activities at REDOX, adjacent to 222-S Laboratories.
      - Continued working with Hanford Fire Department, CHPRC Projects (SWOC/PFP), and CHPRC Work Control to improve communications, and streamline planning/corrective maintenance items. Meeting weekly to document issues and resolution for inclusion into an interface document currently in development.

- Continued working with MSA to develop an Administrative Interface Agreement (AIA) to ensure the Unreviewed Safety Question (USQ) process is completed for procedures and work/activities performed by MSA in CHPRC controlled nuclear facilities. CHPRC Nuclear Safety is reviewing the AIA.
- o Controlling and Service Agreements:
  - Continued efforts in supporting annual review of the J.3 Service Delivery Documents.
  - Continued working with Engineering Services personnel to develop or revise an interface document with MSA Electrical Utilities.
  - Revision of HNF-46148, Water System Services, is in progress. Working with MSA to redefine the lines of demarcation for CHPRC facilities, and better define outage notification and response.
  - Working with WRPS to revise TOC-AIA-PRC-0031, Operations Interface for Activities within or adjacent to Nuclear Facilities; adding additional roles and responsibilities and aligning with current Nuclear Safety processes.
  - Supporting discussions with WRPS regarding the future use of the existing ERDF Leachate Transfer Line and additional tie-in interfaces related to the new Leachate Transfer Line to the 200W P&T.
  - Reviewed letter to RL that requested approval to utilize alternate providers for high rad samples associated with Beryllium analysis.
- o J.3 Table Maintenance-No Action in December.
- o J.13/J.14 Tables Maintenance:
  - Provided preliminary feedback to MSA on the next review of the J.13/J.14 table updates. This update will incorporate the recent transfer of ETF operations to WRPS among other assignments.
  - Internal Operations:
    - Completed planning for the RCCC Transition.
    - Initiated internal work site assessment of MSA Usage Based Service Statements of Work. Completion targeted for the end of February.
    - Assessing the continued need of the Plastic Shop services internal to CHPRC as well as discussing potential transfer with OHCs.
- **Information Management:**
  - o Provided Information Technology (IT), event logistics, and facilitation support to EZAC, PZAC, Ascent Training, and various onsite and offsite meetings.
  - o Provided information clearance and release support for KBO&PR, S&GRP, W&FMP, SHS&Q and PTS documents.
  - o Supported numerous IT support requests for cellular phone issues/questions, meeting set-up, network connections, and printing.
  - o Completed final box of OCRWM records collection reconciliation at the Records Holding Area. MSA assessment and final closure report to be completed in January 2016.
  - o Processed 23,446 Electronic Records into the Integrated Document Management System (IDMS).
- **Performance Analysis and Risk Management Integration (PARMI):**
  - o Technical and Administrative support was provided to the STP during and after the DOE-HQ led External Independent Review (EIR) & Independent Cost Estimate (ICE). Both review teams performed the on-site portion of their reviews the week of November 16, 2015. Actions identified during the Exit Briefing are being tracked; additional actions from the draft report are being evaluated. Transmittal of CHPRC comments to the RL will occur in early January.

- o PRC-MD-PM-53058, *CHPRC Productivity Processes*, was published on December 9, 2015. The Management Directive (MD) describes the process for identifying, reviewing, and evaluating Productivity items. Steps to convert the MD into a Standard document were initiated in December.
- o The Monthly meeting between the Contractor Assurance and Regulatory Reporting, PARMi, and Projects was held on December 15, 2015. The purposes of the monthly meetings are to review productivity data, to determine if trends exist across the CHPRC, and to provide recommended actions related to Corrective Actions. “Dashboard Metrics” are being tracked on the “test” portion of the PTL web page; it is expected that the Metrics will be transitioned to the “live” portion of the PTL web page in January. Field Presentations and Training continued to be provided. Steps to automate Field Execution Schedule item integration into the PTL were initiated in December.
- o Comments for the Draft DOE Standard Review Plan for *Application of Engineering and Technical Requirements for 30, 60, and 90% Design of DOE Nuclear Facilities*, were compiled and transmitted to the EM Chief of Nuclear Safety. Comments ranged from highly technical to philosophical to administrative.
- o Progress continues to be made towards completion of the Productivity Corrective Actions. Completed 20 of 24 actions (83 percent).
- o PARMi Risk Management staff provided Risk Analysis for the STP CAP, the WESF Stabilization and Ventilation Project, and numerous BCRs.
- o Risk Management, Requirements Management, and Business Process Evaluation support was provided to the RCCC Transition Team. PARMi staff met with WCH Risk Management/Requirements Management staff in support of transition of WCH work scope to CHPRC. Program information was provided by the WCH staff. These efforts are expected to continue over the next several months.
- o Revision to CHPRC-MP-MS-19361, *CH2M Hill Plateau Remediation Company Project Execution Plan*, was initiated in December. Once approved internally, the document will be transmitted to the RL for concurrence.

### **Project Technical Services**

- **Engineering Services**

- o Provided authority having jurisdiction review and approval of ten non-nationally recognized testing laboratory certified Nilfisk portable vacuums for PFP.
- o Supported S&GRP in resolving code issues related to pressure testing of piping systems.
- o Provided welding reviews of Project W-130 heater and duct fabrication submittals, and STP drawings for modification of the Sludge Transport and Storage Container.
- o Prepared testing outline document for the Project W-130 ventilation system to aid in definition of scope for Factory, Construction and Operational Acceptance Testing.
- o Supported testing of the new W-130 ventilation system K3N duct heater and reviewed test data for acceptance.

- **Procedures and Training**

- o Completed 45 procedure actions.
- o Leadership Impact Workshop #25 completed.
- o Two Crucial Conversations classes held in December.
- o Attended Training Energy Facility Contractors Group (EFCOG) in Albuquerque. Main topics of interest were reciprocity (for courses taught at other sites), sharing training materials between sites/contractors, and the upcoming revision to DOE O 426.2.
- o Supported training development and procedure updates for TIS modification.

- **Operations Program**
  - o Submitted the Quarterly Startup Notification Report adding T Plant Readiness Assessment and ECRTS Operational Readiness Review.
  - o PFP drill work ups: Completed table tops and a walkthroughs with Deactivation and Decommissioning personnel. Completed walkthroughs and conducting a full up evaluated drill with Hanford Fire Department preparing for Site Limited Exercise January 28, 2016.
  - o Added two Conduct of Work Mentors supporting W&FMP
  - o Developed ConOps presentation for PFP Field Work Supervisors concerning pre-job briefs.
  - o Attended Demonstration/Testing session of latest revision of Job Control System.
  - o Conducted initial ConOps Integration/Assistance visits to SWOC, T Plant, CPSM.
  - o Commenced gap analysis of CHPRC Emergency Preparedness Program with DNFSB reports on the Pantex Plant (Texas) and Savannah River Remediation.
  - o Finalized lines of inquiry for work package evaluations that will be used for new Performance Indicator of Work Management.
  - o Worked with MSA/Fire Systems Maintenance to improve Maintenance/Work Control interface between companies.
- **Project Delivery**
  - o S&GRP
    - Completed work and Construction Completion Document (CCD) at the 2W P&T UP-1 offload station.
    - WESCF 6267 – Completed work and CCD.
    - Perched water well work completed and Contractor (RCS) demobilized from site.
    - Fluidized bed reactor and carbon separation tank platform modifications. Shop fabrication of platform steel has commenced with first steel due to be delivered week of January 4, 2016.
  - o KBO&PR Projects
    - REDOX roof – Received final design for CHPRC release.
    - 189 Clearwell Tank – Completed piping modifications and CCD.
    - 100K area Restroom and Shower – Contract placed for trailer supply and install, Mobilization scheduled for January 2016.
  - o W&FMP Projects
    - Commenced delivery and install of the W-130 WESF Construction trailers.
    - Completed a WESF canyon entry in preparation of planning for core drilling operations
    - 90 percent of steam line removed at WESF W-130 project.
    - WESF Stabilization – Exhauster skid relocated to Contractors facility (American Electric) for refurbishment and testing. Site prep work commenced for install of K3N exhauster foundations.
    - Trench 94 – Progressing with award of contract to OBV. Field mobilization is scheduled for March 2016.
  - o Project Office
    - PM/CM's attended Project Management Professional (PMP) Boot Camp for attaining Project Management Institute PMP Certification.
- **KW Annex Construction**
  - o Continued Construction Acceptance Testing – estimated completion date of January 26, 2016.

- **105 KW Basin Re-Lidding Construction**
  - Completed removal of IET's in Environment Compliance (EC) 260 through 210.
  - Completed installation of the steel and grating North of EC 210.
  - Started permanent speed rail (Guard rail) installation on EC's 260 through 230.
- **T Plant Modification Construction**
  - HEPA vacuums and lift bags have been received and staged.
  - RFP, Addendum 3 has been issued to bidders. Revised proposals and pricing are due on January 6, 2016. Award date is scheduled January 13, 2016.

**Communications**

- Communications developed and proposed to RL a news release and social media posts to acknowledge the completion of the size reduction of Glovebox HA-9A in the PFP.
- Communications developed background information to assist RL in responding to media inquiries related to the contaminated vortex coolers used at the PFP.
- Communications developed public involvement plans and information materials to support regulatory public involvement process for the 100 D/H Proposed Plan and permit modifications for the Solid Waste Operations Complex.

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Office of the President	0.2	0.3	0.4	0.0	20.9%	(0.1)	-46.5%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	(0.0)	-5.6%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	24.7%
Communications	0.1	0.1	0.1	0.0	0.0%	(0.0)	-6.5%
Safety, Health, Security and Quality	1.0	1.0	0.8	0.0	0.0%	0.2	20.4%
Environmental Program and Strategic Planning	0.4	0.4	0.3	0.0	0.0%	0.0	4.5%
Business Services	1.5	1.5	1.4	0.0	0.0%	0.1	4.4%
Prime Contract and Project Integration	1.5	1.5	1.7	0.0	0.0%	(0.3)	-18.7%
Project Technical Services	0.5	0.5	0.5	(0.0)	-0.1%	0.0	6.5%
<b>Indirect WBS 000 Total</b>	<b>5.3</b>	<b>5.3</b>	<b>5.4</b>	<b>0.0</b>	<b>0.9%</b>	<b>(0.1)</b>	<b>-1.1%</b>

Numbers are rounded to the nearest \$0.1M.

#### Indirect WBS 000

##### CM Schedule Performance: (+\$0.0M/+0.9%)

The variance is within reporting thresholds.

##### CM Cost Performance: (-0.1M/-1.1%)

The 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	0.6	0.7	1.3	0.1	13.9%	(0.6)	-0.1%	2.4
Internal Audit	0.2	0.2	0.2	0.0	0.0%	0.0	18.5%	1.1
General Counsel	0.3	0.3	0.2	0.0	0.0%	0.1	38.9%	1.5
Communications	0.2	0.2	0.3	0.0	0.0%	(0.0)	-15.6%	1.0
Safety, Health, Security and Quality	3.2	3.2	2.6	0.0	0.0%	0.6	18.6%	14.8
Environmental Program and Strategic Planning	1.1	1.1	1.1	0.0	0.0%	(0.0)	-0.8%	5.0
Business Services	4.5	4.5	4.5	0.0	0.0%	(0.0)	-0.5%	20.7
Prime Contract and Project Integration	4.5	4.5	4.7	0.0	0.0%	(0.3)	-6.2%	20.7
Project Technical Services	1.5	1.5	1.6	0.0	0.1%	(0.1)	-4.6%	6.9
<b>Indirect WBS 000 Total</b>	<b>16.1</b>	<b>16.1</b>	<b>16.4</b>	<b>0.1</b>	<b>0.5%</b>	<b>(0.3)</b>	<b>-1.8%</b>	<b>74.1</b>

Numbers are rounded to the nearest \$0.1M.

### Indirect WBS 000

**FYTD Schedule Performance: (+\$0.1M/+0.5%)**

The variance is within reporting thresholds.

**FYTD Cost Performance: (-0.3M/-1.8%)**

The variance is within reporting thresholds.



## RISK MANAGEMENT STATUS

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

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																										
		Month	Trend																											
<b>Executive Level Risks</b>																														
<b>Explanation of major changes to the project monthly spotlight chart:</b> No major changes to the risk profile for the month of <b>December</b> .																														
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																														
PRC-022: Higher Than Anticipated Attrition	Higher than planned attrition or staffing reduction is experienced resulting in project schedule delays, and increased training costs.  <b>Risk Handling Strategy:</b> Avoid  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$5 million, 40 days			<b>Risk Event:</b> CHPRC continues to experience higher than anticipated attrition for FY2015. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Implement salary increase fund</td> <td rowspan="7" style="text-align: center;">FY2015</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Proposed PFP incentive program</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Draft retention and recruiting plan investment for FY2015.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop/implement CHPRC People Legacy Program.</td> <td>On-Going</td> <td>N/A</td> </tr> <tr> <td>Target recruiting for key project resources</td> <td>9/30/16</td> <td>22</td> </tr> <tr> <td>Continue PFP resource transition plan for FY2016</td> <td>9/30/16</td> <td>22</td> </tr> <tr> <td>River Corridor Closure recruitment for FY2016</td> <td>9/30/16</td> <td>22</td> </tr> </tbody> </table> <b>Recovery Action Assessment:</b> No changes in the month of <b>December</b> . CHPRC continues to increase recruitment, and analysis of comparable markets for salary competitiveness. Potential problems exist pending funding profiles for other site contractors. No alternative course of actions needed at this time.	Risk recovery action(s)	Risk Date	FC Date	%	Implement salary increase fund	FY2015	Complete	100	Proposed PFP incentive program	Complete	100	Draft retention and recruiting plan investment for FY2015.	Complete	100	Develop/implement CHPRC People Legacy Program.	On-Going	N/A	Target recruiting for key project resources	9/30/16	22	Continue PFP resource transition plan for FY2016	9/30/16	22	River Corridor Closure recruitment for FY2016	9/30/16	22
Risk recovery action(s)	Risk Date	FC Date	%																											
Implement salary increase fund	FY2015	Complete	100																											
Proposed PFP incentive program		Complete	100																											
Draft retention and recruiting plan investment for FY2015.		Complete	100																											
Develop/implement CHPRC People Legacy Program.		On-Going	N/A																											
Target recruiting for key project resources		9/30/16	22																											
Continue PFP resource transition plan for FY2016		9/30/16	22																											
River Corridor Closure recruitment for FY2016		9/30/16	22																											
<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</b>																														
No critical risks identified in the month of <b>December</b> .																														
<b>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</b>																														
No high threat value risks identified in the month of <b>December</b> .																														
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>																														
CHPRC continues to conduct internal reviews to ensure risks are still valid. In cases where risk has passed/or is no longer valid CHPRC will no longer report, and close the risk in the database. In the event risk are still valid ownership will need to be established to further identify and address potential impacts to project cost and schedule. There are cases when risks are identified but are outside the control and management of the contractor. However, CHPRC risk management process identifies all risks that could impact overall project success.																														

## MILESTONE STATUS

None currently identified.

## SELF-PERFORMED WORK

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

## GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified.

# Appendix C

## Capital Asset Projects



December 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

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



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

**December 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1**

## PROJECT SUMMARY

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

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
Glovebox/Hood Removed	-	-	174	162
KPP Rooms/Areas Ready for Demo	-	-	60	60 rooms/areas

### Summary:

The removal of plutonium-contaminated process equipment continued with a particular focus on removing gloveboxes, associated piping, and ductwork. The total number of gloveboxes removed to date is at 93 percent complete.

## KEY ACCOMPLISHMENTS

### 234-5Z

- RMA Line:
  - o Completed size reduction on middle level of Glovebox HA-9A.
- Duct Level:
  - o Removed 445 feet of asbestos.
  - o Removed 249 feet of E-4 ducting from 234-5Z Duct Level.
  - o Removed 16 feet of process transfer lines.

## 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 DSA/TSR Revision 12 was approved by RL on May 4, 2015. Continued with the IRV for HNF-15500 “PFP Deactivation and Decommissioning Documented Safety Analysis” Revision 12 and HNF-15502 “PFP Deactivation and Decommissioning Technical Safety Requirements” Revision 12.

Received the requested approval letter from RL (16-NSD-0002\_RL) authorizing the implementation date for DSA Revision 12 to be moved forward to no later than 30 days after removal of Glovebox HA-9A Plexiglas panels, as opposed to 30 days after glovebox size reduction.

Refresher briefings were conducted the end of December, and full implementation is scheduled for January 12.



CLASSIFICATION (When Filled In)																			
CONTRACT PERFORMANCE REPORT																			
FORMAT 2 - ORGANIZATIONAL CATEGORIES																			
1. CONTRACTOR										2. CONTRACT					3. PROGRAM		4. REPORT PERIOD		FORM APPROVED
a. NAME Ch2M Hill Pittman Remediation Company										a. NAME RL 0011, C1 - PFP D&C (ARRA/Basic)					a. FROM		OMB No. 0704-0188		
b. LOCATION (Address and ZIP Code) Richland, WA										b. NUMBER RL14788					b. TO		2015 / 11 / 23		
c. TYPE										d. SHARE RATIO					c. EWIS ACCEPTANCE		2015 / 12 / 20		
															NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>				
5. PERFORMANCE DATA																			
WBS/Step Org Group																			
ITEM (1)	BUDGETED COST			CURRENT PERIOD			CUMULATIVE TO DATE			REPROGRAMMING ADJUSTMENTS			AT COMPLETION						
	WORK SCHEDULED (2)	WORK PERFORMED (3)	VARIANCE (4)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	VARIANCE (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	VARIANCE (9)	ACTUAL COST WORK PERFORMED (9)	SCHEDULE (10)	VARIANCE (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
35. Business Services	0	0	0	0	0	0	60,427	60,427	52,860	0	-7,847	0	0	0	60,427	60,427	52,860	-7,847	
38. PFP Closure Project	163	227	63	329	63	-102	254,000	252,781	277,855	-1,219	-25,075	0	0	0	254,725	279,773	279,773	-25,048	
B. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
D. UNDISTRIBUTED BUDGET	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
E. SUBTOTAL (Performance Measurement Baseline)	163	227	63	329	63	-102	314,427	313,208	330,636	-1,219	-17,228	0	0	0	315,152	332,353	332,353	-17,201	
F. MANAGEMENT RESERVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
G. TOTAL	163	227	63	329	63	-102	314,427	313,208	330,636	-1,219	-17,228	0	0	0	315,152	332,353	332,353	-17,201	

CLASSIFICATION (When Filled In)





CLASSIFICATION (When Filled In)		CONTRACT PERFORMANCE REPORT FORMAT 4 - STAFFING										FORM APPROVED OMB No. 0704-0188																	
		Dollars in FTE																											
<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>		<b>3. PROGRAM</b>				<b>4. REPORT PERIOD</b>																					
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL 0011, CL - PFP DGD (ARRA) (Base)				a. FROM 2015 / 11 / 23																					
b. LOCATION (Address and ZIP Code) Richard, WA		b. NUMBER RL4788		b. PHASE				b. TO 2015 / 12 / 20																					
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>				2009 / 09 / 18																					
<b>5. PERFORMANCE DATA</b>																													
WBS Resp Org Group		ACTUAL CURRENT PERIOD		ACTUAL END OF CURRENT PERIOD (Cumulative)		SIX MONTH FORECAST BY MONTH (Enter names of months)						AT COMPLETION																	
ORGANIZATIONAL CATEGORY		(2)		(3)		+1 JAN 2016 (4)		+2 FEB 2016 (5)		+3 MAR 2016 (6)		+4 APR 2016 (7)		+5 MAY 2016 (8)		+6 JUN 2016 (9)		REMAIN FY16 (10)		FY17 (11)		FY18 (12)		FY19-FY24 (13)		ATCOMPLETE (14)		(15)	
33 - Business Services		0		17		0		0		0		0		0		0		0		0		0		0		0		0	
38 - PFP Closure Project		23		15306		24		16		9		12		10		9		8		6		6		0		0		1401	
<b>Σ TOTAL DIRECT</b>		<b>23</b>		<b>15322</b>		<b>24</b>		<b>16</b>		<b>9</b>		<b>12</b>		<b>10</b>		<b>9</b>		<b>8</b>		<b>6</b>		<b>6</b>		<b>0</b>		<b>0</b>		<b>15418</b>	

CLASSIFICATION (When Filled In)



CLASSIFICATION (When Filled In)											
CONTRACT PERFORMANCE REPORT											FORM APPROVED
FORMAT 5 - Explanations and Problem Analysis											OMB No. 0704-0188
FORMAT 5 - Explanations and Problem Analysis											4. REPORT PERIOD
<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>			<b>3. PROGRAM</b>					<b>4. REPORT PERIOD</b>	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract			a. NAME RL 0011_C1 - PFP D&D (ARRA/Base)					b. FROM  2015 / 11 / 23	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788			b. PHASE					b. TO  2015 / 12 / 20	
		c. TYPE CPAF	d. SHARE RATIO		c. EVMS ACCEPTANCE No                      X                      Yes					2009 / 09 / 18                      2015 / 12 / 20	
<b>5. Evaluation</b>											
<b>Direct Projects</b>											
	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI		
Current:	163	227	329	63	39%	-102	-45%	1.39	0.69		
Cumulative:	314,427	313,208	330,436	-1,219	0%	-17,228	-6%	1.00	0.95		
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC					
At Complete:	315,152	332,353	-17,201	-5%	-	1.01					
<b>Explanation of Variance/Description of Problem:</b>											
Schedule Variance: The current month positive schedule variance is due to working historical BCWS associated with the HA-9A glovebox size reduction efforts. This is partially offset by the late start of glovebox removals from the 234-52 facility as Revision 12 to the DSA was not able to be implemented until size reduction efforts on the HA-9A glovebox had been completed.											
Cost Variance: The current month cost variance is due to two separate stop works/safety pause at PFP that limited the In-Situ Size Reduction team to make a total of seven entries for the month of December. A stop work issued on November 18 for work on breathing air compressors was not lifted until Monday, November 30, 2016. A safety pause associated with the PremAire breathing equipment was issued on December 14, 2016 which impacted the entire PFP site and lasted through the rest of the month.											
<b>Impact:</b>											
Schedule Impact: The RL-011.C1 project baseline date is November 16, 2016, with the current schedule reflecting a completion date of November 14, 2016. The current RL-11 PBS performance baseline schedule indicates that the PFP project will achieve slab-on-grade by January 19, 2017. The current schedule shows that the work scope to meet the completion of the TPA milestone will not complete until February 2, 2017. The project expects to continue progress at the rate that has been experienced in the past several months; however, even with the implementation of new initiatives (i.e., breathing air, high mass glovebox initiative, foaming, grouting, etc.) the PFP Project is at risk of meeting the TPA milestone M-083-00A of 9/30/16.											
Cost Impact: Cost variance is not considered recoverable. Past performance and successful implementation of the above actions are reflected in the EAC. Historical negative cost variance of 5.5% and CPI of .95 and ~\$17.2M cost variance to date will result in a VAC of ~\$17.2M. This is due to extended duration of the timing to complete size reduction of the HA-9A glovebox as a result of impacts from stop works/safety pauses and incorporation of the use of the PreMaire breathing air suits that will be used to mitigate exposure to the worker and ease in in-situ size reduction of gloveboxes and transferred scope for removal of the gloveboxes from the facility to meet the end point criteria of the Project Execution Plan. As efficiencies continue to be recognized, the EAC will be adjusted. It is not expected that the entire cost variance will be recovered as there is only a small amount of scope remaining to complete the KPP.											
<b>Corrective Action:</b>											
Schedule: Implementation of DSA Revision 12 will allow for removal of confinement walls and therefore provide egress access for gloveboxes marked for removal prior to demolition of 234-52. Action: Ruben Trevino 1/16/16 (NOTE: this date was modified during the Month of December, 2015 as a result of impacts from a stop work and safety pause associated with PremAire breathing air equipment).											
Cost: Cost variance is not considered recoverable. Past performance and successful implementation of the above actions are reflected in the EAC. Historical negative cost variance of 5.5% and CPI of .95 and ~\$17.2M cost variance to date will result in a VAC of ~\$17.2M. This is due to extended duration of the timing to complete size reduction of the HA-9A glovebox as a result of impacts from stop works/safety pauses and incorporation of the use of the PreMaire breathing air suits that will be used to mitigate exposure to the worker and ease in in-situ size reduction of gloveboxes and transferred scope for removal of the gloveboxes from the facility to meet the end point criteria of the Project Execution Plan. As efficiencies continue to be recognized, the EAC will be adjusted. It is not expected that the entire cost variance will be recovered as there is only a small amount of scope remaining to complete the KPP.											
<b>Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):</b>											
Cost variance is not considered recoverable. Past performance and successful implementation of the above actions are reflected in the EAC. Historical negative cost variance of 5.5% and CPI of .95 and ~\$17.2M cost variance to date will result in a VAC of ~\$17.2M. This is due to extended duration of the timing to complete size reduction of the HA-9A glovebox as a result of impacts from stop works/safety pauses and incorporation of the use of the PreMaire breathing air suits that will be used to mitigate exposure to the worker and ease in in-situ size reduction of gloveboxes and transferred scope for removal of the gloveboxes from the facility to meet the end point criteria of the Project Execution Plan. As efficiencies continue to be recognized, the EAC will be adjusted. It is not expected that the entire cost variance will be recovered as there is only a small amount of scope remaining to complete the KPP.											
NOTE: To eliminate the need for modifications and allow resources to concentrate on recovering schedule to assist the project in getting the 234-52 facility demolished by 9/30/16, with the exception of one glovebox that has high gram values too high to be left in place (HA-9A), the remaining gloveboxes have been removed from E-4 ventilation and will be removed from the building during demolition preparations and demolition of the 234-52 facility in FY2016. This approach has been incorporated into the baseline as noted in the CM Variance explanation.											
The following items are addressed, as applicable, per the EVMSIH:											
1. Schedule Margin Analysis: N/A											
2. IMS Data dictionary Changes: N/A											
3. Forecast Schedule with No Baseline: N/A											
4. UB Balance: N/A											
5. Negative ACWP: N/A											
6. EAC Analysis: Best Case = EAC; Most Likely = EAC + MR; Worst Case = ECWR or BCWR (whichever is greater) + ACWP + MR + Trend Log values not already included.											
7. Negative CV > VAC: N/A											
8. MR Transactions: N/A											
9. Freeze Period Changes: N/A											
10. Retroactive Changes: N/A											
11. Indirect Variances: Negative cumulative CV was negated by a positive passback from the Indirect projects, in FY16.											
Prepared by:			Date:			Approved by:			Date:		

## CORRECTIVE ACTION LOG

Control Account	Task Title	FY Year/ Month	CAM	Status	Forecast Completion	Actual Completion	Assigned To
011.05.01.01	DSA Revision 12 Implementation	2016/01	Trevino, Ruben A	Open	1/16/16		Trevino, Ruben A

## RISK MANAGEMENT STATUS

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

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

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

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
<b>RL-0011/WBS-011.05.01.01.06 (CAP.1)</b>										
<b>Explanation of major changes to the project monthly spotlight chart:</b> No major changes to the monthly spotlight chart in the month of <b>December</b> .										
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)										
No realized risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in the month of <b>December</b> .										
<b>Critical Risks</b> (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
<b>FY2016 Risk Triggers</b> (Risk could be realized in FY2016)										
PFP-DEMO-21: Glove Box/Equipment Removal/Demolition Material Handling Event	A material handling event (e.g., dropped piece of process equipment) occurs during the PFP demolition resulting in cost impacts and schedule delays. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Low (10% to 25%) <b>Worst Case Impacts:</b> \$150K, 44 days	<span style="color: green;">●</span>	<span style="color: black;">↔</span>	<p><b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No change in the month of <b>December</b>.</p> <p>The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to adhere to the CHPRC ISMS program/ hoisting and rigging program to include detailed analyses of potential hazards and identification of preventive measures to implement prior to starting the work. At this time no alternative course of actions needed.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)										
<b>FY2016 Risk Triggers</b> (Risk could be realized in FY2016)										
PFP-GB-08: KPP Room Recovery After Contamination Event	An industrial accident or contaminated worker events necessitate a safety stand down or other corrective actions resulting in cost impacts, and schedule delays. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$375K, 44 days	<span style="color: green;">●</span>	<span style="color: black;">↔</span>	<p><b>Risk Trigger:</b> During insitu size reduction activities within RMA/RMC (9A, 9B, 18M). Dates tracked in the FES.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No change in the month of <b>December</b>.</p> <p>The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to adhere to Worker Safety Programs, and implement corrective actions as part of the ISMS feedback loop. At this time no alternative course of actions needed.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								

<p>PFP-GB-09: Bulk Area clean-out scope Increase for KPP Scope</p>	<p>Additional bulk area clean-out results in schedule delays due to contamination events in rooms 228A -228C and 235A3 after Insitu-size reduction activities are complete.  <b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Low (10% to 25%)  <b>Worst Case Impacts:</b> \$0, 16 days</p> <p>*Cost increase will result in cost per day impacts from crews, and hotel load.</p>			<p><b>Risk Trigger:</b> During insitu size reduction activities within RMA/RMC (9A, 9B, 18M). Dates tracked in the FES.</p> <table border="1" data-bbox="885 262 1578 378"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Implement lessons learned from previous size reductions activities (i.e., Room 172 size reduction) into work packages.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Identify/fabricate room sacrificial layers prior to insitu size reduction activities.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b>                  No change in the month of December.                  The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time.                  At this time no alternative course of actions needed.</p>	Mitigation action(s)	FC Date	%	Implement lessons learned from previous size reductions activities (i.e., Room 172 size reduction) into work packages.	Complete	100	Identify/fabricate room sacrificial layers prior to insitu size reduction activities.	Complete	100
Mitigation action(s)	FC Date	%											
Implement lessons learned from previous size reductions activities (i.e., Room 172 size reduction) into work packages.	Complete	100											
Identify/fabricate room sacrificial layers prior to insitu size reduction activities.	Complete	100											
<p><b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)</p>													
<p>No unassigned risks identified for RL-0011 in the month of <b>December</b>.</p>													

**Critical Path Schedule**

The critical path for this project runs through PFP non-capital asset activities. Following adjustments to the PRF Canyon characterization schedule in September, the new PFP Critical Schedule Path to removal of the gloveboxes from the 234-5Z facility and RL-0011.C1 capital asset project flows through the 234-5Z duct level and filter box removal, then to the final focused decontamination throughout 234-5Z. This leads into 234-5Z Cold & Dark and Ready for Demo, allowing removal of the gloveboxes that have been left in place to be removed during demolition of 234-5Z. Once demolition is complete, CD-4 activities to close out the RL-0011.C1 project will be performed.

**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.

umber	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PFP Facility Transition and Selection Disposition Activities	09/30/16		2/2/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, and safety pause associated with a radiological event caused the Tri-Party Agreement milestone projected completion date to slip an additional month for the forecast date in the November report. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed it is anticipated that efficiencies will be recognized to bring the schedule into alignment with a completion date of September 30, 2016. However, this Tri-Party Agreement completion is currently at risk of meeting the September 30, 2016 commitment date. The impacts from the stop work and safety pause in December have caused the schedule to slip one month.

**GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)**

None identified at this time.

# Appendix C.2

## Capital Asset Project

### RL-011.C2 Demolition of PFP Facilities



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

December 2015  
CHPRC-2015-12, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

The following are key metrics associated with this CAP.

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

### Summary:

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

## KEY ACCOMPLISHMENTS

- Completed internal review of Safety Basis Revision 13. The DSA and TSR were transmitted to RL on December 14, 2015.

## 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 DSA/TSR Revision 12 was approved by RL on May 4, 2015. Continued with the IRV for HNF-15500 "PFP Deactivation and Decommissioning Documented Safety Analysis" Revision 12 and HNF-15502 "PFP Deactivation and Decommissioning Technical Safety Requirements" Revision 12.

Received the requested approval letter from RL (16-NSD-0002\_RL) authorizing the implementation date for DSA Revision 12 to be moved forward to no later than 30 days after removal of Glovebox HA-9A Plexiglas panels, as opposed to 30 days after glovebox size reduction.

Refresher briefings were conducted the end of December, and full implementation is scheduled for January 12.

**Issue:**

**Removal of hazardous material will be coordinated using a regulatory compliant graded approach, to avoid cost and schedule impacts associated with complete removal of materials such as brass, electrical components, and lead based paint residues.**

**Corrective Action:**

Coordinate with Maintenance and Waste Integration to establish mass balance calculations for various hazardous materials, demonstrating how much hazardous material may remain with building rubble and still meet ERDF waste acceptance criteria.

**Status:**

CHPRC-02603, Evaluation of Chemical Content in Rubble from the Demolition of 236-Z Facility, December 2015 was issued on December 29, 2015. This document demonstrates that a majority of materials can remain with building rubble and meet ERDF WAC. Prohibited conditions that require remediation prior to demolition are also identified.

The project characterization team is working with D4 team and Waste Integration to detail items that are to be addressed prior to demolition or best reserved for action during the pre-demolition phase of the project.

With respect to further Project/EVMS reporting, this issue is considered resolved.

**Issue:**

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

**Corrective Action:**

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

**Status:**

- Previously packaged J-Pan wastes were unpackaged and placed back in the PRF Canyon.
- Waste packaging instructions for J-Pan wastes were developed and wastes are in process of being packaged per the waste packaging instructions.
- PFP is performing visual inspections of waste drums that contain PRF canyon waste prior to shipment.
- Waste Shipment of PRF Canyon Waste to CWC has commenced with shipment of Non-J Pan wastes; J Pan wastes are being held at PFP pending Laboratory Analysis Results expected in late February.

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE												FORM APPROVED Thousands of \$ OMB No. 0704-0188																									
CONTRACTOR										DOLLARS IN		REPORT PERIOD																									
a. NAME Ch2M Hill Finesse Remediation Company		b. CONTRACT Finesse Remediation Contract		c. PROGRAM RL_0011_C3_PFF Demolition Capital Asset Project		d. FROM (YYYYMMDD) 2015/11/23		e. TO (YYYYMMDD) 2015/12/20																													
a. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL4783		c. TYPE CFAP		d. SHARE RATIO IND X YES (YYYYMMDD) 2009/09/18		e. ESTIMATED CONTRACT CEILING \$3,214		f. DATE OF OTB/OTS (YYYYMMDD)																											
5. CONTRACT DATA		a. QUANTITY 1		b. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0		c. TARGET PRICE \$5,683		d. CONTRACT CEILING \$5,683		e. ESTIMATED CONTRACT CEILING \$3,214																											
6. ESTIMATED COST AT COMPLETION		a. MANAGEMENT ESTIMATE AT COMPLETION (1)		b. CONTRACT BUDGET BASE (2)		c. VARIANCE		d. AUTHORIZED CONTRACTOR REPRESENTATIVE		e. NAME (Last, First, Middle Initial) Dickerson, Bob K.		f. TITLE Prime Contract Manager																									
a. BEST CASE 41,004		b. WORST CASE 48,316		c. MOST LIKELY 47,214		d. VARIANCE -4,470		e. SIGNATURE		f. DATE SIGNED (YYYYMMDD)																											
3. PERFORMANCE DATA												AT COMPLETION																									
CAPJBS												BUDGETED		ACTUAL		REPROGRAMMING		ADJUSTMENTS		VARIANCE																	
Control Account PARS 2 WBS (2)												WORK SCHEDULED (2)		WORK PERFORMED (4)		BUDGETED COST (7)		ACTUAL COST WORK PERFORMED (8)		CUMULATIVE TO DATE (9)		SCHEDULE VARIANCE (12b)		COST VARIANCE (12a)		BUDGET (13)											
ITEM												[2]		[4]		[7]		[8]		[9]		[12b]		[12a]		[13]		[14]		[15]							
RL-0011 Nuclear Mat Sep & Disp												461		118		-343		10		6,832		6,656		6,344		292		0		45,483		41,004		4,470			
RL_0011_C3_05 Disposition PFF												0		0		0		0		0		0		0		0		0		0		0		0			
c. COST OF MONEY												0		0		0		0		0		0		0		0		0		0		0		0		0	
d. GENERAL AND ADMINISTRATIVE												0		0		0		0		0		0		0		0		0		0		0		0		0	
4. UNDISTRIBUTED BUDGET												461		118		-343		10		6,832		6,656		6,344		292		0		45,483		41,004		4,470			
e. SUBTOTAL												461		118		-343		10		6,832		6,656		6,344		292		0		45,483		41,004		4,470			
f. MANAGEMENT RESERVE												0		0		0		0		0		0		0		0		0		0		0		0			
g. TOTAL												461		118		-343		10		6,832		6,656		6,344		292		0		45,483		41,004		4,470			
9. RECONCILIATION TO CONTRACT BUDGET BASELINE												a. VARIANCE ADJUSTMENT		b. TOTAL CONTRACT VARIANCE		-196		292		51,683		41,004		10,670													





1. CONTRACTOR	2. CONTRACT	3. PROGRAM	4. REPORT PERIOD	FORM APPROVED							
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract	a. NAME RL 0011_C2 PFP Demolition Capital Asset Project	Thousands of \$	OMB No. 0704-0288							
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	a. FROM 2015 / 11 / 23								
c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> YES	b. TO 2015 / 12 / 20								
<b>5. PERFORMANCE DATA</b>											
WBS Step Org Group											
ITEM (1)	CURRENT PERIOD		CUMULATIVE TO DATE		REPROGRAMMING ADJUSTMENTS		AT COMPLETION				
	BUDGETED COST WORK SCHEDULED (2)	ACTUAL COST WORK PERFORMED (4)	VARIANCE SCHEDULE (5)	BUDGETED COST WORK SCHEDULED (7)	ACTUAL COST WORK PERFORMED (8)	SCHEDULE (10)	COST VARIANCE (12A)	SCHEDULE VARIANCE (12B)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
38 - PFP Closure Project	461	118	-343	6,882	6,636	-246	292	0	45,483	41,014	4,470
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET	0	0	0	0	0	0	0	0	0	0	0
e. SUBTOTAL (Performance Measurement Baseline)	461	118	-343	6,882	6,636	-246	292	0	45,483	41,014	4,470
f. MANAGEMENT RESERVE	0	0	0	0	0	0	0	0	6,200	6,200	0
g. TOTAL	461	118	-343	6,882	6,636	-246	292	0	51,683	47,214	4,470

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE												DOLLARS IN THOUSANDS		Form-Approved OMB No. 0704-0188	
1. CONTRACTOR CH2M HILL Palisau Remediation Company b. LOCATION: Richland, WA	2. CONTRACT a. NAME: Palisau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:	3. PROGRAM a. NAME: Palisau Remediation Contract b. PHASE: c. EVMS ACCEPTANCE NO	4. REPORT PERIOD a. FROM: 2015/11/23 b. TO: 2015/12/20	5. CONTRACT DATA	6. PERFORMANCE DATA	7. MANAGEMENT RESERVE	8. TOTAL	9. DIFFERENCE (E - F) (16)	10. EST. COMPLETION DATE 9/30/2018	11. UNDISTRIB BUDGET (17)	12. TOTAL BUDGET \$51,683				
a. ORIGINAL NEGOTIATED COST 51,683	b. NEGOTIATED CONTRACT CHANGE \$0	c. CURRENT NEGOTIATED COST (A + B) \$51,683	d. ESTIMATED COST AUTH UNPRICED WORK \$0	e. CONTRACT BUDGET BASE (C + D) \$51,683	f. TOTAL ALLOCATED BUDGET \$51,683	g. CONTRACT START DATE 6/19/2008	h. CONTRACT START DATE 6/19/2008	i. CONTRACT COMPLETION DATE 9/30/2018	j. CONTRACT COMPLETION DATE 9/30/2018	k. CONT. COMPLETION DATE 9/30/2018	l. EST. COMPLETION DATE 9/30/2018				
SIX MONTH FORECAST															
ITEM	BOWS CUM TO DATE (2)	BOWS FOR REPORT PERIOD (3)	+1 Jan-16 (4)	+2 Feb-16 (5)	+3 Mar-16 (6)	+4 Apr-16 (7)	+5 May-16 (8)	+6 Jun-16 (9)	FY13-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	TOTAL BUDGET (17)
a. PM BASELINE (BEGIN OF PERIOD)	6,371	461	332	455	1,406	3,212	3,429	3,061	0	0	6,090	26,447	12,347	0	45,483
b. BASELINE CHANGES AUTH DURING REPORT PERIOD None during the reporting period															0
c. PM BASELINE (END OF PERIOD)	6,602	461	332	455	1,406	3,212	3,429	3,061	0	0	6,090	26,447	12,347	0	45,483
7. MANAGEMENT RESERVE															6,200
8. TOTAL															51,683



CLASSIFICATION (When Filled In)  
**CONTRACT PERFORMANCE REPORT**  
 FORMAT 4 - STAFFING

FORM APPROVED  
OMB No. 0704-0188

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CLASSIFICATION (When Filled In)  
 DOLLAR: FTE

<b>1. CONTRACTOR</b>	<b>2. CONTRACT</b>	<b>3. PROGRAM</b>	<b>4. REPORT PERIOD</b>
a. NAME CH2M HILL Plebeus Remediation Company	a. NAME Plebeus Remediation Contract	a. NAME RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM 2015 / 11 / 23
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO 2015 / 12 / 20
c. TYPE CPAF	d. SHARE RATIO	c. EYMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>	

ORGANIZATIONAL CATEGORY	ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD (Cumulative)	SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS				AT COMPLETION		
			+1	+2	+3	+4	+5	+6	REMAIN FY16	FY17	FY18	FY19-FY24		ATCOMPLETE	
3B - PFP Closure Project	2	15	(4)	(5)	(6)	(7)	(8)	(9)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
3B - PFP Closure Project	2	15	20	14	19	16	75	100	100	354	404	404	0	0	1018
<b>TOTAL DIRECT</b>	<b>2</b>	<b>15</b>	<b>20</b>	<b>14</b>	<b>19</b>	<b>16</b>	<b>75</b>	<b>100</b>	<b>100</b>	<b>354</b>	<b>404</b>	<b>404</b>	<b>0</b>	<b>0</b>	<b>1018</b>

CLASSIFICATION (When Filled In)



CLASSIFICATION (When Filled In)									
CONTRACT PERFORMANCE REPORT									FORM APPROVED
FORMAT 5 - Explanations and Problem Analysis									OMB No. 0704-0188
1. CONTRACTOR		2. CONTRACT		3. PROGRAM				4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project				a. FROM 2015 / 11 / 23	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE				b. TO 2015 / 12 / 20	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE No                      X                      Yes				2009 / 09 / 18	
5. Evaluation									
Direct Projects									
	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	461	118	100	-343	-74%	18	16%	0.26	1.19
Cumulative:	6,832	6,636	6,344	-196	-3%	292	4%	0.97	1.05
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	45,483	41,014	4,470	10%	0.99	1.12			
<p><b>Explanation of Variance/Description of Problem:</b>                      Schedule Variance: Current month negative schedule variance is attributed to late receipt of a telehandler dust suppression unit that was expected to be delivered in December.</p> <p>Cost Variance: Starting demolition of the ancillary facilities has been pushed out due to resource constraints caused by other critical path PFP Operations Projects (i.e., readying PRF for demolition). This has resulted in less project management support charges than planned in this LOE account during the current period. In addition, The PFP Demolition Readiness Assessment activity continues to be behind schedule as a result of impacts from stop works/safety pauses that have affected the entire PFP Facility. These stop works and safety pauses are related to breathing air equipment issues. This has also resulted in less subcontract charges against this LOE account than initially planned. The baseline plan was for a Management Assessment while the current DOE direction is for a more stringent Readiness Assessment which includes a site exercise.</p> <p><b>Impact:</b>                      Schedule: Delayed receipt of the telehandler will be no impact to the execution of the demolition activities as they are currently slated to begin in the May time frame. In addition, Stop Works and Safety Pauses are impacting the work to ready facilities for demolition. Recovery actions are being reviewed and will be put in place when finalized to support recovery of the schedule delays.</p> <p>Cost: Stop Works and Safety Pauses are impacting the work to ready facilities for demolition. Recovery actions are being reviewed and will be put in place when finalized to support recovery of the schedule delays. The readiness assessment will continue to lag, and costs will increase to support this effort as more radiological oversight is required to support the PFP project related to the safety pause compensatory measures. In addition, costs will lag until receipt of the telehandler dust suppression unit.</p> <p><b>Corrective Action:</b>                      Schedule/Cost: Work with vendor to expedite delivery of the remote control unit for the Telehandler which will allow for the final operational testing of the machine with the remote control to support demolition of the 236-Z Facility. Action: Trevino 1/31/16</p> <p><b>Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):</b>                      The positive cost variance for PM support will continue until work scope on ancillary facilities begins. The current positive cost variance on the Readiness activity is anticipated to reduce significantly as the more stringent Readiness Assessment and site exercise complete.</p> <p>The following items are addressed, as applicable, per the EVMSIH:                      1. Schedule Margin Analysis: During the month of December the RL-011.C2 Demolition Capital Asset project lost 14 calendar days of schedule margin compared to the schedule margin dates in November. This is as a result of impacts from stop works associated with PremAire breathing air issues related to size reduction of the HA-9A glovebox and impacts from a safety pause associated with a radiological event also related to the PremAire breathing air equipment. Overall, the C2 project has lost 2 calendar days against the original baseline schedule margin activity.                      2. IMS Data dictionary Changes: N/A                      3. Forecast Schedule with No Baseline: N/A                      4. UB Balance: N/A                      5. Negative ACWP: N/A                      6. EAC Analysis: Best Case = EAC; Most Likely = EAC + MR; Worst Case = ECWR or BCWR (whichever is greater) + ACWP + MR + Trend Log values not already included.                      7. Negative CV &gt; VAC: N/A                      8. MR Transactions: N/A                      9. Freeze Period Changes: N/A                      10. Retroactive Changes: N/A                      11. Indirect Variances: Negative cumulative CV was negated by a positive passback from the Indirect projects, in FY16.</p>									
Prepared by:		Date:		Approved by:				Date:	



## CORRECTIVE ACTION LOG

Control Account	Task Title	FY Year/ Month	CAM	Status	Forecast Completion	Actual Completion	Assigned To
011.05.C3.03	Expedite Delivery of Remote Control Telehandler	2016/03	Lucas, Chris	Open	1/31/16		Trevino, Ruben A

## RISK MANAGEMENT STATUS

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

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

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

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments														
		Month	Trend															
<b>RL-0011/WBS-011.05.C3 (CAP.2)</b>																		
<b>Explanation of major changes to the project monthly stoplight chart:</b> No major changes to the monthly stoplight chart in the month of December.																		
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																		
PFP-DEMO-23: Demolition Equipment Reliability and Modification	Ineffective demolition equipment attachments or mechanical failures impact the demolition of PFP. Equipment modification, leasing, or replacement will be required resulting in cost impacts <b>Risk Handling Strategy: Control</b>  <b>Probability: Medium (26% to 74%)</b> <b>Worst Case Impacts: \$1 million, 66 days</b>	<span style="color: red;">●</span>	↔	<p><b>Risk Event:</b> The baseline assumed existing equipment loaned to another Hanford Contractor was available to commence demolition activities. In November it was identified that assumed equipment will not be available to support the project needs.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Risk Recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Interface with WCH to identify equipment needs.</td> <td rowspan="3" style="text-align: center;">11/2/15</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Process BCR to account for changing assumptions</td> <td style="text-align: center;">1/24/16</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Deliver and stage equipment on-site</td> <td style="text-align: center;">3/30/16</td> <td style="text-align: center;">50</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> Interface meetings were held with WCH, and it was identified that 6 water monitors, and 2 water trailers will need to be purchased. In addition, 3 water trucks, 15 light plants, and 1 compressor will be leased. A BCR will be processed to draw down management reserve to cover the changing baseline assumptions.</p> <p>After BCR is processed this risk will no longer be reported, and the risk will be re-characterized and monitored internal to the project.</p>	Risk Recovery action(s)	Risk Date	FC Date	%	Interface with WCH to identify equipment needs.	11/2/15	Complete	100	Process BCR to account for changing assumptions	1/24/16	75	Deliver and stage equipment on-site	3/30/16	50
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<b>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</b>																		
<b>FY2016 Risk Triggers (Risk could be realized in FY2016)</b>																		
PFP-DEMO-21: Glove Box/Equipment Removal/Demolition Material Handling Event	A material handling event (E.g., dropped piece of process equipment) occurs during the PFP demolition resulting in cost impacts and schedule delays. <b>Risk Handling Strategy: Accept</b>  <b>Probability: Low (10% to 25%)</b> <b>Worst Case Impacts: \$150K, 44 days</b>	<span style="color: green;">●</span>	↔	<p><b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016. Dates tracked in the FES.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No change in the month of December. The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to adhere to the CHPRC ISMS program/ hoisting and rigging program to include detailed analyses of potential hazards and identification of preventive measures to implement prior to starting the work. At this time no alternative course of actions needed.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A								
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PFP-DEMO-07: Removal/Extraction of Equipment Takes Longer Than Planned	Controlled demolition of equipment, gloveboxes, and portions of the cross-cutting process support systems (i.e. ventilation) result in cost impacts, and schedule delays. <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$1.5 million, 45 days	●	↔	<b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016. Dates tracked in the FES.															
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<b>Mitigation Assessment:</b> No changes in the month of December; however the forecasted date to pre-rig process equipment may be delayed due to emerging issues (i.e., the chemical reaction that presented itself on the PRF Canyon floor clean up, and the Premier Breathing Air System). ETC was updated to reflect schedule and cost impacts. At this time no alternative course of actions needed.																			
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)																			
<b>FY2016 Risk Triggers</b> (Risk could be realized in FY2016)																			
PFP-DEMO-05: Inclement Weather	Inclement weather, including moderate winds, low or high temperatures and thunderstorms will impact the demolition of PFP. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Low (10% to 25%) <b>Worst Case Impacts:</b> \$0K, 66 days  *Cost increase will result in cost per day impacts from crews, and hotel load.	●	↔	<b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016. Dates tracked in the FES.															
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<b>Mitigation Assessment:</b> No change in the month of December. The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to develop work plans to incorporate required controls. At this time no alternative course of actions needed.																			
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)																			
To ensure success of the project ownership needs to be established to further identify and address potential impacts to project cost and schedule. There are cases when risks are identified but are outside the control and management of the contractor. However, CHPRC risk management process identifies all risks that could impact overall project success.																			
PFP-DEMO-18: Level of Readiness Effort	PFP Demolition activities and hazard categorization provide for a Readiness Assessment; however, due to the first of its kind project at the Hanford Site, CHPRC will be directed by the customer to perform a more rigorous RA than planned resulting in cost impacts and schedule delays.  CHPRC Comment: The rework required between the first submittal on May 26, 2015, through the resubmittal on August 27, 2015, (Reference 2) and subsequent approval on October 8, 2015, (Reference 1) has increased cost of demolition and impacted schedule. The additional cost is due to a technical difference in the readiness scoring by RL that is not consistent with historical scoring. The addition of a readiness team and performance of an exercise versus a drill have impacted the project. The additional requirements may represent realization of previously identified risk PRC-010, Requirements Change. Accordingly, CHPRC is entitled to an adjustment to cost and fee to implement the direction.																		

**Critical Path Schedule**

The critical path for this project runs through PFP non-capital asset activities. Following adjustments to the PRF Canyon characterization schedule in September, the new PFP Critical Schedule Path to slab on grade and completion of the RL-0011.C2 capital asset project flows through the 234-5Z duct level and filter box removal, then to the final focused decontamination throughout 234-5Z. This leads into 234-5Z Cold & Dark and Ready for Demo, allowing demolition of 234-5Z and attached facilities to commence. Once demolition is complete, stabilization of the PFP site is performed to reach the final Tri-Party Agreement milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*; after which CD-4 activities to close out the RL-0011.C2 project will be performed.

## MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PFP Facility Transition and Selection Disposition Activities	09/30/16		2/2/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, and safety pause associated with a radiological event caused the Tri-Party Agreement milestone projected completion date to slip an additional month for the forecast date in the November report. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed it is anticipated that efficiencies will be recognized to bring the schedule into alignment with a completion date of September 30, 2016. However, this Tri-Party Agreement completion is currently at risk of meeting the September 30, 2016 commitment date. The impacts from the stop work and safety pause in December have caused the schedule to slip one month.

## GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified at this time.