

# Monthly Performance Report

February 2016

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

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



P.O. Box 1600  
Richland, Washington 99352

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**APPROVED**

*By Ashley Jenkins at 2:35 pm, Mar 28, 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

**February 2016**  
CHPRC-2016-02, Revision 0

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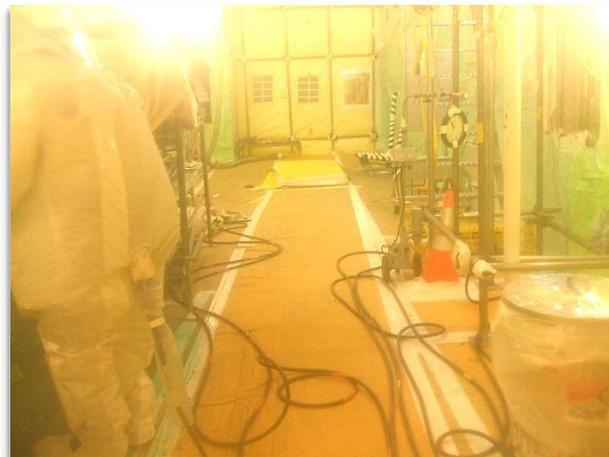
## APPENDICES

Appendix A – Contract Performance Reports
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## EXECUTIVE SUMMARY

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

- The Plutonium Finishing Plant (PFP) closure project completed the removal of Glovebox HA-9A from the main PFP facility, and began the process of decontaminating the Plutonium Reclamation Facility (PRF) canyon walls.
- The Waste and Fuels Management Project (W&FMP) completed the TPA M-091-47B milestone for FY2016, which calls for the treatment of 280 cubic meters (m<sup>3</sup>) of TRUM/MLLW waste. The Waste Encapsulation and Storage Facility (WESF) Stabilization and Ventilation Project (W-130) continued work on the K3N ventilation system skid pad foundation.
- The Soil and Groundwater Remediation Project (S&GRP) completed the 2-year Remedial Investigation groundwater sampling, which satisfies the requirements for TPA Milestone M-015-78.
- The K Basin Operations and Plateau Remediation (KBO&PR) project completed the relidding of all six of the engineered containers in the K West Basin and continued to prepare for the Maintenance and Storage Facility (MASF) Preoperational Acceptance Testing.



**Glovebox HA-9A was removed from PFP.**



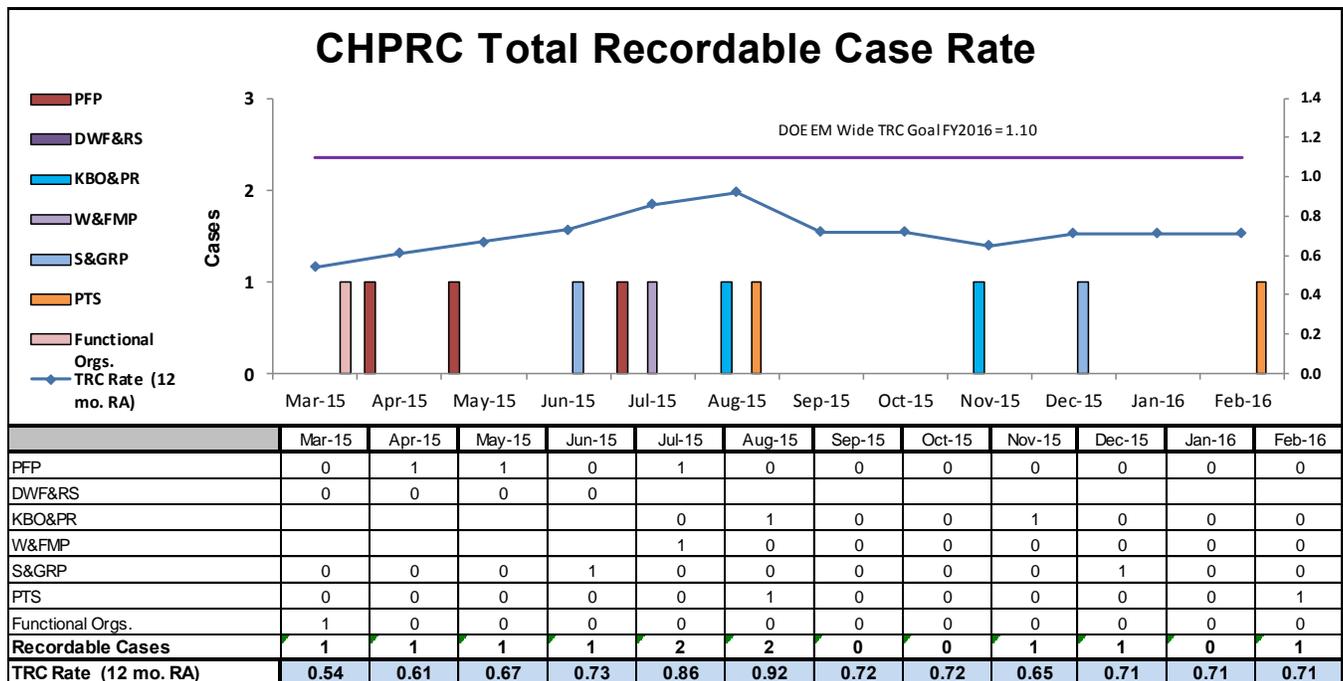
**Expansion of the K3N ventilation skid pad in progress.**

The February 2016 President's Zero Accident Council (PZAC) meeting was hosted by the Waste & Fuels Management Project.

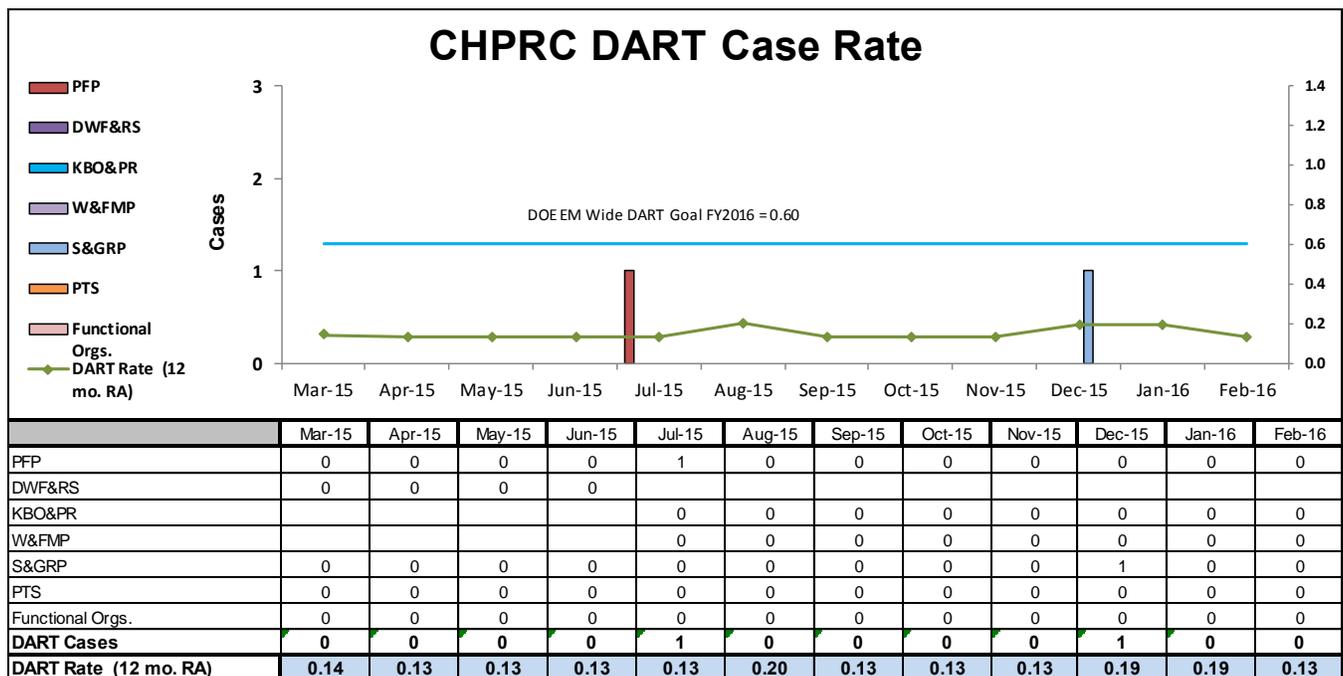
- The three main ideas for the meeting were:
  - Exercise - A healthy lifestyle full of exercise is your best weapons in the fight against heart disease.
  - Eat Right - A balanced diet provides nutrients to your body.
  - Sleep - The better night's sleep you get, the healthier your heart will be.
- Four "*Thinking Target Zero*" (TTZ) bulletins were published in February to convey important occupational, safety, health, and environmental messages:
  - Environmental Compliance.
  - Wearing your PPE.
  - VPP Safety and Health Goals in 2016.
  - Heart Health – helps your head!
  - EMS Targets and Objectives.
- February *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
  - Three Lessons Learned: Maintain pinch point awareness when using powered hand tools; Argonne National Laboratory – Employee cuts hand; and Priest Rapids Dam Generator Circuit Breaker Explosion; Double fatality - when two dump trucks collide head-on.
  - Weekly Ethics Moment.
  - Space heater recall.
  - Looking out for each other.
  - Permanent speed limit change.
  - Stay aware of winter hazards.
  - Safety Refocus after Holiday weekend.
  - Medications at Work.
  - When to Call 911.
  - OptimAir TL PAPR Gaskets.
  - Optional Emergency Information Badge Cards.
  - Proper disposal of personal medical supplies used at work.
  - Fan heater recall.
  - Join Stretch and Flex.
- The February Kudos Corner recognized individuals and teams who made a significant contribution to safety at work, home or play:
  - A 100-K Quality Assurance Engineer, who, after personally experiencing icy roads on site the morning of a meeting, called each attendee to warn them of road conditions before they left for the meeting.
  - The Business Services organization, which has had No Lost Days, DART, or Recordable Cases since June of 2010, achieving more than 1.5 million safe work hours!
  - The PFP team that safely and compliantly finished cutting up and packaging the most heavily contaminated glove box within the facility.
  - A worker from S&GRP who arrived before others in her building on a cold winter morning and cleared walkways and applied ice melt before the rest of the people from her building arrived.

## TARGET ZERO PERFORMANCE

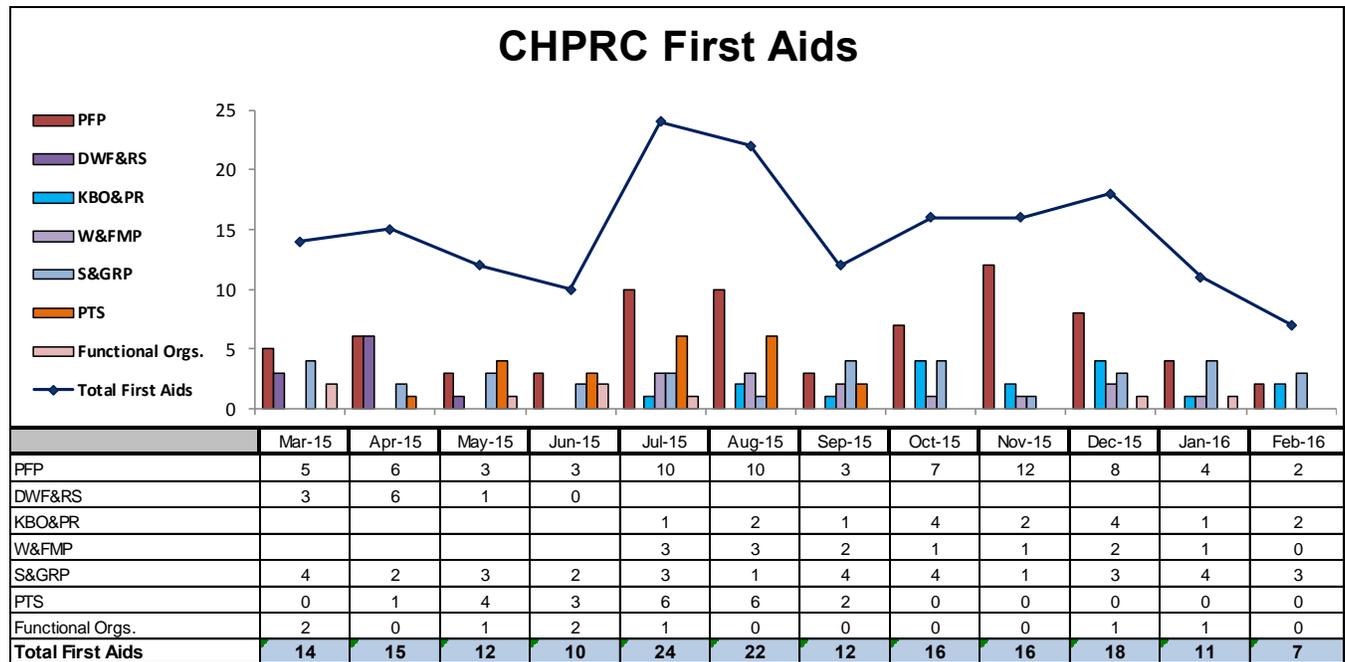
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.71 is based on a total of eleven Recordable injuries. There was one Recordable case for February. 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 0.13 is based upon a total of two Days Away cases. There were no DART cases in February.



First Aid Case Summary: CHPRC reported seven first aid cases in February; of these, three cases required no treatment. There were two self-treated injuries. The contributors were six sprains/strains/pains and one cut/laceration/puncture injury. This is the first single digit reporting of first aids across the CHPRC in several months.

### KEY ACCOMPLISHMENTS

#### Projects

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

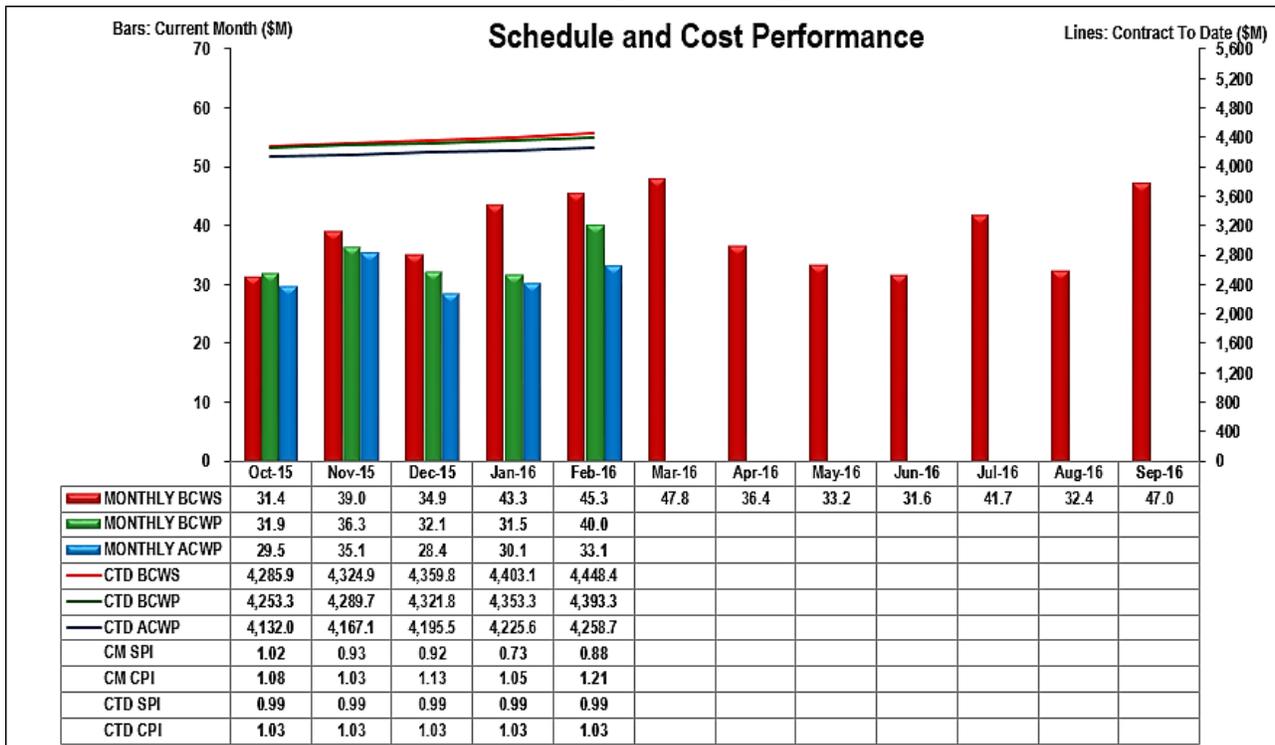
#### Project Services and Support

- 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	8.4	5.8	7.9	(2.6)	(2.1)	910.4	870.6	879.6	(39.9)	(9.0)	971.9	1,013.2	(41.4)	
RL-0012 - SNF Stabilization & Disposition	13.9	15.1	5.3	1.1	9.8	554.5	555.3	556.9	0.8	(1.6)	722.4	719.6	2.7	
RL-0013 - Solid Waste Stab & Disposition	8.8	8.6	7.6	(0.1)	1.0	1025.3	1024.6	962.0	(0.8)	62.6	1,332.7	1,260.0	72.7	
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	11.2	8.8	8.9	(2.4)	(0.1)	1205.1	1191.2	1170.3	(13.9)	20.9	1,555.2	1,516.0	39.2	
RL-0040 - Nuc Fac D&D - Remainder	1.4	1.2	1.1	(0.2)	0.1	409.8	408.5	376.7	(1.2)	31.9	469.1	434.9	34.2	
RL-0041 - Nuc Fac D&D - RC Closure Project	1.5	0.3	2.1	(1.2)	(1.8)	322.5	322.2	296.2	(0.2)	26.0	404.2	375.3	28.9	
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.1	(0.0)	0.0	20.9	20.9	17.1	0.0	3.9	26.5	22.8	3.7	
<b>Total</b>	<b>45.3</b>	<b>40.0</b>	<b>33.1</b>	<b>(5.4)</b>	<b>6.9</b>	<b>4,448.4</b>	<b>4,393.3</b>	<b>4,258.7</b>	<b>(55.1)</b>	<b>134.6</b>	<b>5,481.9</b>	<b>5,341.9</b>	<b>140.1</b>	

(Values are rounded to the nearest \$0.1M)

(Values do not have UB breakout)

### Performance Summary

CHPRC continues to track completion of contract scope within budget and is currently projecting a Variance at Completion of \$140.1 million with \$93.5 million of Management Reserve (MR) for a total positive variance of \$233.6 million. For February, the project was 11.9 percent behind schedule and 17.2 percent under planned cost. CTD, the project was 1.2 percent behind schedule and 3.1 percent under planned cost.

The current month unfavorable schedule variance is primarily due to RL-0011 PFP Management directed safety pause. Progress was stopped on intrusive planned work while the project re-evaluated safety practices and procedures. Also, RL-0030 drilling campaigns in 200-PO-1 and 200-UP-1

Operable Units have been deferred to align with priority list and available funding. The current month favorable cost variance is attributed to RL-0012, impacts from the definitization of REA-12-1519 STP, *STP Sequestration Impacts*, as documented by Contract Modification (CM) 482.

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

PBS	Project	FY2016		Variance
		Projected Funding	Spending Forecast	
<b>Spending Forecast</b>				
RL-0011	Nuclear Materials Stabilization and Disposition	110.7	102.3	8.4
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	53.0	47.5	5.5
RL-0012	15-D-401 Sludge Retrieval Project	68.1	33.9	34.2
RL-0013	Waste and Fuels Management Project	106.6	86.7	19.9
RL-0030	Soil, Groundwater and Vadose Zone Remediation	124.3	117.9	6.5
RL-0040	Nuclear Facility D&D, Remainder of Hanford	24.1	21.9	2.3
RL-0041	Nuclear Facility D&D, River Corridor	19.1	15.5	3.6
RL-0042	Fast Flux Test Facility Closure	3.2	1.8	1.4
<b>Total Spending Forecast</b>		<b>509.2</b>	<b>427.5</b>	<b>81.7</b>
<b>Incremental Scope Pending Change Management</b>				
RL-0012	Spent Nuclear Fuel Stabilization and Disposition		0.6	(0.6)
RL-0013	Waste and Fuels Management Project		16.4	(16.4)
RL-0030	Soil, Groundwater and Vadose Zone Remediation		0.9	(0.9)
RL-0041	Nuclear Facility D&D, River Corridor		8.3	(8.3)
<b>Total Non-Contract Work Scope</b>		<b>0.0</b>	<b>26.2</b>	<b>(26.2)</b>
<b>Total Base:</b>				
RL-0011	Nuclear Materials Stabilization and Disposition	110.7	102.3	8.4
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	53.0	48.1	4.9
RL-0012	15-D-401 Sludge Retrieval Project	68.1	33.9	34.2
RL-0013	Waste and Fuels Management Project	106.6	103.1	3.5
RL-0030	Soil, Groundwater and Vadose Zone Remediation	124.3	118.8	5.6
RL-0040	Nuclear Facility D&D, Remainder of Hanford	24.1	21.9	2.3
RL-0041	Nuclear Facility D&D, River Corridor	19.1	23.8	(4.7)
RL-0042	Fast Flux Test Facility Closure	3.2	1.8	1.4
<b>Total Base:</b>		<b>509.2</b>	<b>453.7</b>	<b>55.5</b>

**Funds/Variance Analysis**

FY2016 expected funding was increased in February from \$505.3 million to \$509.2 million. Revised expected funding includes a reduction in RL-0011 of \$135K for RL Radcon support, and an increase to RL-0041 of \$4 million for River Corridor Closure Contract (RCCC) transition. The Fiscal Year Spending Forecast (FYSF) was revised to incorporate scope deferrals and efficiencies based on current and projected project performance.

## BASELINE CHANGE REQUESTS

In February 2016, CHPRC approved and implemented eleven (11) BCRs impacting the Performance Measurement Baseline (PMB). Each change request is identified in the table below:

Change Request #	Title	Summary of Change
BCR-012-16-009R0	<i>Implementation of PBS RL-0012 Operating Expense Schedule Health Corrections</i>	This BCR incorporates schedule health changes, and schedule coding field "DOE Action" for DOE deliverables required for the successful execution of CHPRC activities that had not been populated. This BCR corrects the oversight by modifying the schedule coding in FY2016 and beyond to populate this field. This BCR does not change the PMB value.
BCR-012C-16-007R0	<i>Definitization of REA-12-1519 STP Sequestration Impacts</i>	This BCR incorporates the impacts to PBS RL-0012 from the definitization of REA-12-1519 STP, STP Sequestration Impacts, as documented by CM 482. This BCR increased the PMB by \$9,000K.
BCR-012C-16-010R0	<i>Correct RL-0012 CAP 15-D-401 Sludge Retrieval Project Baseline Planning Errors and Coding Updates</i>	This BCR revises the CAP 15-D-401 Sludge Treatment Project, planning to correct planning errors, including incorporation of coding updates and corrections, schedule health changes, and to correct scope description inconsistencies between WBS Dictionaries and related BOEs. This BCR decreased the PMB by \$3K.
BCR-013-16-016R0	<i>Definitization of REA 013 1538, 231-Z-DR-11 Concrete Box Mitigation</i>	This BCR incorporates the scope associated with the definitization of REA 013 1538, 231-Z-DR-11 Concrete Box Mitigation, as documented by CM 474. This BCR increased the PMB by \$871K.
BCR-013-16-018R0	<i>Incorporation of Schedule Health Modification to IMS</i>	This BCR incorporates modifications to the PBS RL-RL-0013 integrated master schedule to address schedule health issues. This BCR does not change the PMB value.
BCR-030-16-019R0	<i>Definitization of CO #291, 200-IS-1 WIDs Information</i>	This BCR incorporates the scope associated with the definitization of Change Order (CO) #295, 200-IS-1 Geographic Interface Segmentation, as documented by CM 470. This BCR decreased the PMB by \$2K.
BCR-030-16-020R0	<i>Definitization of CO #295 200-IS-1 Geographic Interface Segmentation</i>	This BCR incorporates the scope associated with the definitization of CO #291, 200-IS-1 WIDs Information, as documented by CM 473. This BCR increased the PMB by \$307K.
BCR-040-16-005R0	<i>Deferral of Canyon Risk Mitigation Planning Package</i>	This BCR delays the start of the Canyon Risk Mitigation Planning Package to resolve with RL which canyon risk mitigation activities will be performed with this planning package. This BCR does not change the PMB value.
BCR-040-16-006R0	<i>Definitization of CO #190, Lysimeter Test Facility</i>	This BCR incorporates the scope associated with the definitization of CO #190, Lysimeter Test Facility as documented by CM 475. This BCR increased the PMB by \$146K.

The Allocated (Distributed) Budget increased by \$10,319K.

### Undistributed Budget Activity

BCR Number	Title	Fiscal Year	UB
BCR-041C-16-011R0	<i>PBSS RL-0041 Undistributed Budget Adjustments February 2016</i>	2015 - 2018	\$ 4,000K
BCR-PRC-16-029R0	<i>Undistributed Budget Adjustments February 2016</i>	2015 - 2018	\$ 7,072K

The Undistributed Budget increased by \$11,072K for an overall increase to the Performance Measurement Baseline of \$21,391K during February.

### Management Reserve Activity

BCR Number	Title	Fiscal Year	MR
N/A	N/A	2015 - 2018	N/A

Overall, there was no change to Management Reserve during February.

### Fee Activity

BCR Number	Title	Fiscal Year	Fee
BCR-012C-16-007R0	<i>Definitization of REA-12-1519 STP Sequestration Impacts</i>	2015 - 2018	\$500K
BCR-013-16-016R0	<i>Definitization of REA 013 1538, 231-Z-D-R-11 Concrete Box Mitigation</i>	2015 - 2018	\$37K
BCR-030-16-019R0	<i>Definitization of CO #291, 200-IS-1 WIDs Information</i>	2015 - 2018	\$114K
BCR-030-16-020R0	<i>Definitization of CO #295 200-IS-1 Geographic Interface Segmentation</i>	2015 - 2018	\$16K
BCR-040-16-006R0	<i>Definitization of CO #190, Lysimeter Test Facility</i>	2015 - 2018	\$7K

Overall, there was an increase of \$674K to Fee during February.

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):

**February 2016 Summary of Changes**

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
<b>January 2016 Estimate</b>									
PMB	3,391,477	391,653	471,323	453,717	403,813	348,546	2,069,051	5,460,527	5,460,527
MR	0	0	0	20,297	33,786	39,404	93,487	93,487	93,486
Fee	155,504	14,325	14,501	21,463	9,463	17,822	77,574	233,078	233,078
<b>Total</b>	<b>3,546,981</b>	<b>405,978</b>	<b>485,824</b>	<b>495,476</b>	<b>447,062</b>	<b>405,772</b>	<b>2,240,111</b>	<b>5,787,092</b>	<b>5,787,092</b>
<b>February 2016 Change</b>									
<b>PMB</b>									
Change to PMB	0	0	0	10,324	11,166	-99	21,391	21,391	21,391
<b>MR</b>									
Change to MR	0	0	0	0	0	0	0	0	0
<b>Fee</b>									
Change to Fee	0	0	0	674	0	0	674	674	674
<b>Total Change</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,998</b>	<b>11,166</b>	<b>-99</b>	<b>22,065</b>	<b>22,065</b>	<b>22,065</b>
<b>February 2016 Estimate</b>									
PMB	3,391,477	391,653	471,323	464,041	414,979	348,446	2,090,442	5,481,919	5,481,919
MR	0	0	0	20,297	33,786	39,404	93,487	93,487	93,486
Fee	155,504	14,325	14,501	22,137	9,463	17,822	78,248	233,752	233,752
<b>Total</b>	<b>3,546,981</b>	<b>405,978</b>	<b>485,824</b>	<b>506,474</b>	<b>458,228</b>	<b>405,673</b>	<b>2,262,177</b>	<b>5,809,158</b>	<b>5,809,157</b>

**Changes to/Utilization of Management Reserve in February 2016**

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
<b>January 2016 MR Totals</b>								
RL-0011	0	0	0	5,879	3,257	0	9,136	9,136
RL-0012	0	0	0	3,395	7,125	5,642	16,162	16,162
RL-0013	0	0	0	2,999	8,200	12,425	23,624	23,624
RL-0030	0	0	0	2,777	7,949	12,370	23,095	23,095
RL-0040	0	0	0	10,000	4,236	1,761	6,997	6,997
RL-0041	0	0	0	4,096	2,800	7,000	13,896	13,896
RL-0042	0	0	0	150	220	207	576	576
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29,296</b>	<b>33,786</b>	<b>39,404</b>	<b>93,486</b>	<b>93,486</b>
<b>February 2016 MR Changes/Utilization</b>								
RL-0011	0	0	0	0	0	0	0	0
RL-0012	0	0	0	0	0	0	0	0
RL-0013	0	0	0	0	0	0	0	0
RL-0030	0	0	0	0	0	0	0	0
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	0	0	0	0
RL-0042	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>February 2016 MR Totals</b>								
RL-0011	0	0	0	5,879	3,257	0	9,136	9,136
RL-0012	0	0	0	3,395	7,125	5,642	16,162	16,162
RL-0013	0	0	0	2,999	8,200	12,425	23,624	23,624
RL-0030	0	0	0	2,777	7,949	12,370	23,095	23,095
RL-0040	0	0	0	10,000	4,236	1,761	6,997	6,997
RL-0041	0	0	0	4,096	2,800	7,000	13,896	13,896
RL-0042	0	0	0	150	220	207	576	576
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29,296</b>	<b>33,786</b>	<b>39,404</b>	<b>93,486</b>	<b>93,486</b>

## SELF-PERFORMED WORK

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

Contract-to-Date Actual Awards & Mods				Projection to FY18	
10/1/2008 -2/29/2016				Planned Subcontracting:	\$2,564,285,972
Reporting Category				Contract-to-date awards:	\$2,317,057,629
				Bal remaining to award:	\$247,228,343
	\$ Value	%	Goal %	Goal award\$	Bal to Goal
SB	\$1,213,173,089	52.36%	49.3%	\$1,264,192,984	\$51,019,895
SDB	\$207,965,118	8.98%	8.2%	\$210,271,450	\$2,306,332
SWOB	\$241,453,464	10.42%	7.5%	\$192,321,448	-\$49,132,016
HUB	\$45,982,712	1.98%	2.2%	\$56,414,291	\$10,431,579
VOSB	\$154,690,900	6.68%	3.5%	\$89,750,009	-\$64,940,891
SDVO	\$81,108,070	3.50%	1.3%	\$33,335,718	-\$47,772,352
NAB	\$36,993,877	1.60%	N/A		
Large	\$614,508,916	26.52%	N/A	PRC clause H.20 small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
GOVT	\$2,334,409	0.10%	N/A		
GOVT CONT	\$482,866,522	20.84%	N/A		
EDUCATION	\$102,592	0.00%	N/A	CHPRC Contract Value:	\$5,732,255,464
NONPROFIT_	\$3,708,720	0.16%	N/A	17% rqmt:	\$974,483,429
FOREIGN	\$363,379	0.02%	N/A	SB actual:	\$1,213,173,089
Total	\$2,317,057,629	100.00%	N/A	Bal to rqmt	-\$238,689,661

### 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)



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

February 2016  
CHPRC-2016-02, 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	-	23,801 feet
Process Vacuum Piping Dispositioned	-	3,907 feet
Process Transfer Line Dispositioned	-	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	12m <sup>3</sup>	2,086 m <sup>3</sup>
LLW/MLLW Shipped	40m <sup>3</sup>	6,924 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.

- Preparing implementation of HNF-15500 “PFP Deactivation and Decommissioning Documented Safety Analysis” Revision 13 and HNF-15502 “PFP Deactivation and Decommissioning Technical Safety Requirements” Revision 13. Awaiting SER from RL to begin formal IVR process.
- Demobilized final materials from grouting the PRF Canyon Floor.
- Began glove changes in PRF in preparation for gallery glovebox work.
- Removed Filter Box 3P and Filter Box 24 in Room 308 of 234-5Z.
- Removed the remainder of the product transfer line in Room 262 in 234-5Z.
- Completed in-situ size reduction of Glovebox HA-9A.
- Shipped 12m<sup>3</sup> TRU/TRU-M waste.
- Shipped 40m<sup>3</sup> LLW/MLLW.

## EMS Objectives and Target Status

Objective #	Objective	Targets	Actions	Due Date	Status
16-EMS-PFP-OB1-T1	Minimize emissions resulting from demolition of 234-5Z, 236-Z, 242-Z, and 291-Z.	Inspect 234-5Z, 236-Z, 242-Z, and 291-Z for the presence of asbestos containing materials (ACM) and produce a report identifying ACM requiring removal or abatement and methods for protecting remaining ACM from resulting in visible emissions.	<ol style="list-style-type: none"> <li>1. Issue report documenting thorough inspection of 236-Z</li> <li>2. Issue report documenting thorough inspection of 242-Z</li> <li>3. Issue report documenting thorough inspection of 234-5Z</li> <li>4. Issue report documenting thorough inspection of 291-Z</li> </ol>	<p>02/29/16</p> <p>03/31/16</p> <p>06/30/16</p> <p>09/30/16</p>	<p>85%</p> <p>Renegotiating Due Dates</p> <p>Renegotiating Due Dates</p> <p>Renegotiating Due Dates</p>
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.	<ol style="list-style-type: none"> <li>5. Issue air dispersion modeling report</li> </ol>	12/31/15	100%

## TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	2	73	<ul style="list-style-type: none"> <li>2/11/16 – Employee caught instruments after they had slipped from her hand. Felt pain and discomfort in right shoulder. Examined and diagnosed with sprain/strain to shoulder. Returned to work with no restriction. (23934)</li> <li>2/18/16 – Employee working on scaffold and struck head on a joint in duct work causing injury. Skin care was provided and employee released to work with no restriction. (23937)</li> </ul>
Near Misses	0	5	

## KEY ACCOMPLISHMENTS

### 11.02 Maintain Safe & Compliant PFP

Preparing implementation of HNF-15500 “PFP Deactivation and Decommissioning Documented Safety Analysis” Revision 13 and HNF-15502 “PFP Deactivation and Decommissioning Technical Safety Requirements” Revision 13. Awaiting SER from RL to begin formal IVR process.

### 11.05 Disposition PFP Facility

#### 234-5Z

- RMA Line:
  - Completed in-situ size reduction of Glovebox HA-9A.
- Duct Level:
  - Removed Filter Box 3P and Filter Box 24 in Room 308.
  - Removed the remainder of the product transfer line in Room 262.

#### PFP Waste Operations

- Shipped 12m<sup>3</sup> TRU/TRU-M waste.
- Shipped 40m<sup>3</sup> LLW/MLLW.

#### 236-Z PRF

- Canyon:
  - Demobilized residual materials from grouting.
  - Began glove changes in preparation for gallery glovebox work.

## MAJOR ISSUES

**Issue:**

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

**Corrective Action:**

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

**Status:**

- Waste packaging instructions for J Pan wastes were developed and waste has been packaged per the waste packaging instructions.
- PFP is performing 100 percent visual inspections of waste drums that contain PRF canyon waste prior to shipment.
- Waste Shipment of PRF Canyon Waste to 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 to be complete in late March.

**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 (MSA) 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 MSA 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.

Additional equipment (Scott-brand regulators) was found with contamination at the Hanford Fire Department. This was deemed to be associated with the same causal evaluation as the vortex coolers. The Root Cause was determined to be that the procedure/process was less than adequate. The development of a clearance survey plan did not require any verification or validation of assumptions. The clearance survey plan that had allowed the clearance (release) of this equipment using a 67% confidence level survey (this only requires a survey of 50% of the surface area). Assumptions were made in the development of the CSP, but were not documented (not required at the time), the assumptions were not verified/validated (not required at the time), no management approval required (not required at the time). This process has been revised to require formal training for both the author and the peer reviewer, documentation of all assumptions – to include a verification/validation of assumptions and a review by the RadCon Manager.

## 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 spotlight chart:</b> No major changes to the monthly spotlight chart in the month of <b>February</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>February</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: 20px;">●</span>	<span style="color: black; font-size: 20px;">↔</span>	<p><b>Risk Trigger:</b> Will continue throughout project lifecycle until Demolition</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Mitigation action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Establish separate characterization crew solely tasked to complete remaining characterization data collection work</td> <td style="text-align: center;">Complete (2/24/16)</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Perform NDA of the PRF Canyon to test feasibility that a single assay evolution could provide result allowing for termination of canyon walls and strongbacks as one unit</td> <td style="text-align: center;">Complete (2/14/16)</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Perform gamma imaging surveys in conjunction with final PRF canyon cleanup to strategically focus final decontamination.</td> <td style="text-align: center;">3/23/16</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;">3/17/16</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Revise the project DQO to incorporate provisions to leave for demolition higher residual levels of contamination when supported by the air dispersion model and waste operations</td> <td style="text-align: center;">3/31/16</td> <td style="text-align: center;">50</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;">4/10/16</td> <td style="text-align: center;">75</td> </tr> <tr> <td>Complete 234-5Z Duct Level and backside inspections to identify piping with TSI dropping through to the first floor ceiling void.</td> <td style="text-align: center;">4/10/16</td> <td style="text-align: center;">75</td> </tr> </tbody> </table> <p>activities commence.</p> <p><b>Mitigation Assessment:</b>                      In the month of February the project conducted quarterly risk register reviews. The risk component associated with final characterization of the PRF canyon, gallery gloveboxes, and strongbacks remains critical. This is due to the likelihood that final characterization could demonstrate, after completion of current cleanup activity, that further decontamination of structures and components is necessary. Schedule delays/operational impacts limited commencement of canyon cleanup activity, which is now in progress. Completion dates for mitigation action regarding final characterization of the PRF gallery gloveboxes, canyon walls, and strongbacks have been updated to accordingly.</p> <p>The risk component associated with late discovery of asbestos in need of further removal/abatement is no longer critical. Duct level inspections of crawlspaces are in progress and upon completion of abatement in room 262, added insulator resources will be available to campaign the identification of TSI remaining in 234-5Z by the date indicated. Given the sufficient lead time, there is greater confidence that the added work can be completed by existing insulator crew strength assigned and planned through May 2016. In this regard, the work has been incorporated into the ETC. Mitigation action delays do not result in alternative course of actions at this time.</p>	Mitigation action(s)	FC Date	%	Establish separate characterization crew solely tasked to complete remaining characterization data collection work	Complete (2/24/16)	100	Perform NDA of the PRF Canyon to test feasibility that a single assay evolution could provide result allowing for termination of canyon walls and strongbacks as one unit	Complete (2/14/16)	100	Perform gamma imaging surveys in conjunction with final PRF canyon cleanup to strategically focus final decontamination.	3/23/16	25	Devise new multiple sensor NDA characterization plans that allow for improved quantification of residual MAR while deactivation work is ongoing.	3/17/16	75	Revise the project DQO to incorporate provisions to leave for demolition higher residual levels of contamination when supported by the air dispersion model and waste operations	3/31/16	50	Develop SAP for steam lines in 291-Z fanhouse to confirm current TSI labelling. 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Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
<b>RL-0011/WBS-011.OA</b>																
<b>FY2016 Risk Triggers</b> (Risk could be realized in FY2016)																
PFP-DEMO-02: Air Modeling Increases Equipment Removal/Decontamination for Demo	Air Dispersion identified additional MAR reduction higher than planned or RL directs constrains from Revision 12 SER, resulting in additional decontamination/fixatives and equipment removal prior to initiating open-air demolition resulting in schedule delays. <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"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Brief regulatory stakeholders on air model results</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Process Rev. 2 to the PNNL Air Dispersion Model</td> <td>3/30/16</td> <td>10</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>4/10/16</td> <td>50</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Brief regulatory stakeholders on air model results	Complete	100	Process Rev. 2 to the PNNL Air Dispersion Model	3/30/16	10	Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.	4/10/16	50
				Mitigation action(s)	FC Date	%										
				Brief regulatory stakeholders on air model results	Complete	100										
Process Rev. 2 to the PNNL Air Dispersion Model	3/30/16	10														
Once the residual material/contamination is quantified, work with regulators to identify controls to allow for equipment removal and demolition as planned.	4/10/16	50														
<b>Mitigation Assessment:</b> In the month of February the project conducted quarterly risk register reviews. It was identified that CHPRC obtained the PNNL Air Dispersion Model document and this risk was no longer critical. Based on conditions and prerequisites identified in the PFP Demolition Plan, Revision 1 to the PNNL Air Dispersion Model Report did not pose an increased risk. The model did not drive a need for MAR reduction, fixative applications, or equipment removal beyond that which is planned. The Demolition Plan is being revised to limit activities to dayshift only, effectively extending the demolition duration and avoiding unfavorable meteorological conditions typically encountered on swing shift. The Demolition Plan is also changing to reflect intent to disposition strongbacks during demolition. Due to these changes, a second revision to the air dispersion model is in progress. This risk will remain open until Revision 2 of the air dispersion model is completed and it is determined that the risk no longer poses a threat. At this time no alternative course of actions needed.																
<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-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> During glovebox isolations NDA process allows for section results to be used.												
				<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Complete West Gallery Glovebox Isolation - 2nd Floor, Vacuum Gallery Gloveboxes, And Wipe Down and Decon, Apply Fixative, and Characterize.</td> <td>4/12/16</td> <td>0</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Complete West Gallery Glovebox Isolation - 2nd Floor, Vacuum Gallery Gloveboxes, And Wipe Down and Decon, Apply Fixative, and Characterize.	4/12/16	0						
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Complete West Gallery Glovebox Isolation - 2nd Floor, Vacuum Gallery Gloveboxes, And Wipe Down and Decon, Apply Fixative, and Characterize.	4/12/16	0														
<b>Mitigation Assessment:</b> No changes in the month of February. 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</b> (Pending ownership of identified risks/opportunities)																
No unassigned risks identified in the month of February.																

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled (BCWS)	Budgeted Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	8.4	5.8	7.9	(2.6)	-30.6%	(2.1)	-36.3%

Numbers are rounded to the nearest \$0.1 million.

#### CM Schedule Variance: (-\$2.6M/-30.6%)

The current month unfavorable schedule variance is primarily due to the PFP Management directed safety pause. Progress was stopped on intrusive planned work while the project re-evaluated safety practices and procedures. This resulted in minimal planned work being performed. Crews resumed filter box and transfer line removal in the final week of the fiscal month. In addition, impacts to discrete field work planned for the current period were caused by stop works impacting all intrusive work, and impacts recognized as a result of a PFP management directed safety pause.

#### CM Cost Variance: (-\$2.1M/-36.3%)

The current month unfavorable cost variance primarily relates to the lack of progress on discrete D&D work scope (apportioned) while a constant staff provides D&D support services. PM and DDM charges have been higher than anticipated due to support of identified initiatives that PFP is trying to implement (i.e., increased radiological and industrial hygiene and increased management assessments as a result of implemented compensatory measures from the radiological event that occurred in December 2015). More DSA modifications than assumed are also contributing to the variance. In addition, during the PFP Management directed Safety pause associated with Radiological Work, all intrusive planned work was put to a halt while the project re-evaluated safety practices and procedures. Costs were still incurred while resources reviewed work packages, worked on "housekeeping" efforts and reviewed safety protocol in an effort to resume discrete work. Once stop work and safety pause were lifted, the crews utilized product overtime to try to gain schedule, which contributed to over run in cost for the month. Project management and D&D cross-cut charges have been higher than anticipated due to increased support of implementation of identified compensatory measures associated with the recent radiological events at PFP. In addition, subcontracted labor support costs are higher than planned due to extended discrete field work and consumable materials are costing more than planned due to the extended duration of the discrete field work and increased radiological survey requirements on PPE.

## 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	910.4	870.6	879.6	(39.9)	-4.4%	(9.0)	-1.0%	971.9	1,013.2	(41.4)

Numbers are rounded to the nearest \$0.1 million

### CTD Schedule Variance (-\$39.9M/-4.4%)

The Schedule Variance is within reporting thresholds.

### CTD Cost Variance (-\$9.0M/-1.0%)

The Cost Variance is within reporting thresholds.

### Variance at Completion (-\$41.4M/-4.3%)

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
Spending Forecast	110.7	102.3	8.4
RL-0011 - Total	110.7	102.3	8.4

Numbers are rounded to the nearest \$0.1 million

### Funds/Variance Analysis

FY2016 expected funding for RL-0011 remained steady at \$110.7 million. The FYSF for February increased from \$99.4 million to \$102.3 million as a result of a change in the project approach to retain all existing staff until the 234-5Z facility is ready for demolition in December 2016.

### Critical Path Schedule

The PFP Critical Schedule Path flows through cleaning and scabbling the PRF Canyon, which leads to final cleanout and isolation of the Gallery gloveboxes. Once the Galleries are isolated, the filter boxes associated with the PRF Canyon will be cleaned and isolated allowing the final PRF filters to be removed. This leads to isolating PRF from a Cold & Dark standpoint and makes PRF ready for demo. Demolition will immediately begin on PRF, then 242-Z, and finally 234-5Z. 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		*6/22/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, safety pause associated with a radiological event, and reduction to five field work teams vs. eight caused the Tri-Party Agreement milestone projected completion date to slip an additional 110 calendar days for the forecast date in the January report. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, efficiencies will continue to be evaluated and implemented to recover schedule delays. However, this Tri-Party Agreement completion is not expected to be met.

\* Project Manager Assessment is completed by 4/30/2017. The current Forecast Date of 6/22/2017 does not factor in crew alignment.

## 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)

February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

- The 100K Operations group continued maintaining facilities in a safe and compliant condition, supporting the Engineered Container Retrieval and Transfer System (ECRTS) Project work by supporting Annex construction In-Basin Construction activities and continued debris dose rating and relocation activities in 105KW Basin. The Operations team worked several monthly and quarterly routines during the period.
- Members of the RL Safety Basis Review Team have concurred on all Preliminary Documented Safety Analysis (PDSA) comment resolutions. A final RL Safety Review Board (SRB) is scheduled for March 1, 2016 with a SER and approval by the Safety Basis Approval Authority following the SRB meeting. Development of the KW Basin integrated DSA, which combines the ECRTS PDSA and the KW Basin FSAR into a single safety basis document continued.
- Continued receipt of ECRTS Process System equipment and testing activities at MASF in preparation for MASF Preoperational Acceptance Testing (MPAT). All necessary equipment has been scheduled to be installed and MPAT initiated in early April 2016.
- The External Independent Review (EIR) was received from the Office of Project Management Oversight and Assessments (PM-30). All major findings related to cost and schedule were addressed in BCR-012-16-010R0. The EIR Team has recommended approval of the Project CD 2/3 at \$311 million (the project's estimate). However, the EIR Team recommends the schedule reflect retrieval start of November 2019 at 80 percent confidence. One year beyond the Project's forecast date. The project is being presented to DOE Headquarters in March.
- Completed all fieldwork for removal of sampling equipment, installation of divider plate to EC-230, and installation of new lids to engineered containers. This represents the first work inside the KW Basin for the STP Project and was performed in a timely manner with no major incidents.

## 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	2	17	<ul style="list-style-type: none"> <li>• 2/1/2016 - Employee was working in tight quarters and bumped shoulder against a locker causing body to twist. Body part affected: Low Back. (23928).</li> <li>• 2/24/2016 - Employee was moving equipment, twisting, and bending causing low back pain. Body part affected: Low Back (23943).</li> </ul>

## KEY ACCOMPLISHMENTS

- ECRTS Process Equipment Procurement:
  - o Buy Back Set #2: Safety Significant (SS) Transfer System Components - Transfer Line Service Boxes were delivered to MASF. All hardware on this contract release has been delivered to MASF.
  - o Procurement Set #10: SS Truck Scale & Control Panel – All components on this release were successfully receipt inspected by AVS. The SS Control Panel, ECRT-PNL-401 was delivered to MASF and the Truck Scale Weigh Bridge was delivered to 100K Area.
  - o Procurement Set #11: Inert Gas and Auxiliary Ventilation System – Task 1 – Purge Panel – Fabrication was completed. Task 2 – Supply Panel – Fabrication and testing was completed. Task 3 - Cylinder Cradles – Factory acceptance testing was completed. Task 6 - Misc. Aux vent components – Fabrication and testing activities were completed.
  - o Procurement Set #12: SS Oxygen Analyzer – Delivered to MASF.
  - o Procurement Set #14: SS Control System Panels – Task 2 – ECRT-PNL-105, Transfer Pump Control Panel has been delivered to MASF. Task 3; ECRT-PNL-107, Blending Panel – AVS completed receipt inspection and the panel was delivered to MASF. Task 9 – ECRT-PNL-602, Aux Vent Control Panel has been delivered to MASF. Task 10 – Ethernet Cables – delivered to MASF.
- KW Annex Construction completed:
  - o PM-12-3-16 Complete Annex Facility CATs and Construction Turnover. Submitted completion documentation to CHPRC contracts.
  - o Construction Completion Documentation (CCD) for both Contractors (FE&C and Ojeda).
  - o Issued Limited Notice to proceed for preventative maintenance contract for the Annex building mechanical systems (i.e. Compressor/HVAC).
  - o Resolution of nine of the 10 fire ATP test deficiencies.
- K Basin/Annex Equipment install design completed:
  - o Construction Aid #2 has been released to construction.
- 105 KW Basin Re-Lidding Construction completed:

- o PM-12-4-16 Removal Sample Equipment from KW Basin Engineered Containers (EC), Remove Top Two Sections, Install Divider Plate to EC-230 and Install New Lids on the ECs.
- Issued LNTP for NE Corner (Ingress/Egress) contract to Apollo.
- Installing permanent speed rail on north side of EC openings on EC-210, 220, 230, 240, 250 and 260.
- Door 146A modification and started removal of exterior barrier.
- T-Plant Construction completed:
  - o FAT Testing on the Leak Detection system.
  - o Sump Leak Test.
  - o Pneumatic Leak testing of Nitrogen Purge Panel.
  - o Secured a flatbed trailer for hauling IP-2 waste containers into and out of the T-Plant Tunnel loading bay.
- 100K Operations completed:
  - o Shipment of Ion Exchange Modules (IXMs) to burial.
  - o Modifications to 105KW demin water system. Test after completion of work confirmed no leaks detected.

## 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 spotlight chart:</b>												
No major changes to the monthly spotlight chart in the month of <b>February</b> .												
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>												
STP-123-T: Design Maturity - T-Plant	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. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Very Likely (>90%) <b>Worst Case Impacts:</b> \$200K, 96 days			<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" 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>No additional recovery actions identified at this time.</td> <td>3/03/15</td> <td>N/A</td> <td>N/A</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). All indications, based on discussions with RL, are that Revision 11 of the MDSA will be approved. CHPRC is expecting decision by the end of March 2016. If the MDSA is not approved as submitted, there is a potential for the design to change. If Revision 11 is signed as is, Engineering will remove the hold on the Nitrogen System ECR and we will give direction to the contractor to move forward with procurement of material in early April 2016.                      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 released and has been provided in Addendum 3 of Contract Req. 275085 for the contractors to bid on. The project was awarded on January 14, 2016.                      The schedule activities have been sequenced such that installation will occur following the RL review and approval period of the MDSA. In the event the project receives 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.                      All planned recovery actions are complete and no additional alternative course of actions needed at this time.                      CHPRC is currently awaiting a possible DOE Letter of Direction regarding MDSA and FHA update.</p>	Risk recovery action(s)	Risk Date	FC Date	%	No additional recovery actions identified at this time.	3/03/15	N/A	N/A
Risk recovery action(s)	Risk Date	FC Date	%									
No additional recovery actions identified at this time.	3/03/15	N/A	N/A									

Risk Title	Unmitigated Risk Impacts	Assessment		Comments								
		Month	Trend									
<b>RL-0012/WBS-012</b>												
STP-085-B: Attrition, Acquisition, & Retention of Qualified Professional Staff & Craft Resources - ECRTS Annex/In-Basin Equip. Installation	<p>Due to the improving job market and local and complex wide competition for key resources, project delivery will be impacted by the Attrition, Acquisition and Retraining of Qualified Professional Staff. These resources are critical to the timely and cost effective delivery of the work scope.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$940K, 24 days</p>	●	↔	<p><b>Risk Event:</b> In the month of February, the project experienced the loss of several key position including a project manager, project planner, schedulers, and vacant project control positions. Although work continues, the amount of lost time experienced is difficult to measure.</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>No additional recovery actions identified at this time.</td> <td>2/7/16</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment</b> The project is in the process of filling the vacant positions and working with the current staff to address attrition concerns. The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified. No alternative course of actions necessary at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	No additional recovery actions identified at this time.	2/7/16	N/A	N/A
Risk recovery action(s)	Risk Date	FC Date	%									
No additional recovery actions identified at this time.	2/7/16	N/A	N/A									
STP-120-B: Design & Engineering During Construction (Title III) - ECRTS Annex/In-Basin Equip. Installation	<p>As a result of as-found conditions, errors and omissions in design details, and field interferences are identified during construction requiring clarification and rework of design media. Additionally, changes in engineering processes, engineering codes or standards (e.g., code of record), other requirements (e.g., PDSA, FHA), changes in other site processes or procedures (e.g., H&amp;R, OS&amp;IH, L&amp;T) will also impact construction execution. These changes are imminent and outside the projects control.</p> <p><b>Risk Handling Strategy:</b> Control</p> <p><b>Probability:</b> Very Likely (&gt;90%) <b>Worst Case Impacts:</b> \$2M, 56 days</p>	●	↑	<p><b>Risk Event:</b> In the month of February, the project incurred additional cost resulting from HVAC Design Issues -Ventilation System Zone Temperature Control, DCN - 171 (Provide Shielding Supports at Sand Filter and Vertical Hose Chase Areas), DCN-413 (Release Sand Filter Shielding Calculation) DCN -267 (Revise Tool and Shielded Cave Shelf). Additionally, 2-RCIs (125 and 126) have been received relating to the heat load in the Ventilation System in the mechanical room (DCN - TBD).</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>No additional recovery actions identified at this time.</td> <td>2/8/16</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> At this time, no additional recovery actions identified. The project continues to identify project needs before they become critical and delay planned work scope. This reoccurring risk may experience additional impacts over the course of the project. No additional mitigation actions are planned at this time to address other potential impacts.</p>	Risk recovery action(s)	Risk Date	FC Date	%	No additional recovery actions identified at this time.	2/8/16	N/A	N/A
Risk recovery action(s)	Risk Date	FC Date	%									
No additional recovery actions identified at this time.	2/8/16	N/A	N/A									
STP-121-B: As-Found Conditions - ECRTS Annex/In-Basin Equip.	<p>Historically, As found, unknown-unknowns, and emergent conditions have impacted construction execution and contractor performance.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Very Likely (&gt;90%) <b>Worst Case Impacts:</b> \$1.3M, 48 days</p>	●	↑	<p><b>Risk Event:</b> In the month of February, the project incurred additional cost resulting from delays due to IXM modified due to ECRTS equipment installation; RWP void limit reached during IXM filter change out; Re-posting the Basin as ARA; Stop Work while Shift office, Engineering and Nuc Safety were contacted to determine path forward for "Drop Light Fixture" encountered on top of the sludge bed in container 250; and problems with Facility Decon water make-up system.</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>No additional recovery actions identified at this time.</td> <td>3/16/15</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> At this time, no additional recovery actions identified. The project continues to identify project needs before they become critical and delay planned work scope. To date the risk has incurred costs for the purchase of additional cameras and long reach tools to support construction activities; camera cable connectors; underwater cameras; additional tools and equipment for re-lidding; unanticipated painting; hose assembly modifications; contamination delays; additional subcontractor labor to perform underwater video; Airborne Radiation Area down posted delayed work scope; replacement of SOV-774/AOV-774 valves; disconnection of second water injection hose connected to SCS-CON-230; and decontamination of contaminated long reach tool-need RWP to allow decontamination of tool. No alternative course of actions necessary at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	No additional recovery actions identified at this time.	3/16/15	N/A	N/A
Risk recovery action(s)	Risk Date	FC Date	%									
No additional recovery actions identified at this time.	3/16/15	N/A	N/A									

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
<b>RL-0012/WBS-012</b>													
STP-123-B: Design Maturity - ECRS Annex/In-Basin Equip.	Finalization of design media for the ECRS equipment installation will result in changes to both cost and schedule. 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> \$1.3M, 96 days			<p><b>Risk Event:</b> In the month of February, the project incurred additional cost from delays resulting from: DCN's including but not limited to 068 (Release Shielding Calculations and KW Modified Annex ALARA Design Review Checklist), DCN-409 (105KW Annex Gutter Heat Trace), DCN-391 (Add P-10 Gas Lines to Annex), DCN-400 (Transport System Aux Vent and Inert Gas Installation).</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>No additional recovery actions identified at this time.</td> <td>3/16/15</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> At this time, no additional recovery actions identified. The project continues to identify project needs before they become critical and delay planned work scope. No alternative course of actions necessary at this time.</p>	Risk recovery action(s)	Risk Date	FC Date	%	No additional recovery actions identified at this time.	3/16/15	N/A	N/A	
Risk recovery action(s)	Risk Date	FC Date	%										
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<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)													
No critical risks identified in the month of February.													
<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	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. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$1.3M, 44 days			<p><b>Risk Trigger:</b> Routine S&amp;M activities identify problems with aging building systems/ components. This reoccurring 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 February. 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
Mitigation action(s)	FC Date	%											
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<b>FY2016 Risk Triggers</b> (Risk could be realized in FY2016)													
STP-093-B: Operational Resources Limitations for Construction Support - ECRS Annex/In-Basin Equip. Installation	During installation the ECRS process equipment installation multiple activities, which are currently planned in the FES, compete for the same operational resources (e.g., NCO's, HPT's, Shift Managers, RA, RM, Work Planners). In addition, emergent resource limitations also emerge (e.g., training, sick leave, vacation, short/long term) causing equipment installation delays.  Additional resources needed due to the requirement for increased confidence in release surveys (95% versus 67%). Internally driven, possibly requiring more RCTs.  <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$1.9M, 64 days			<p><b>Risk Trigger:</b> Planned Activities compete for the same operational resources, and resource limitations emerge resulting in delays.</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> </tbody> </table> <p><b>Mitigation Assessment:</b> No changes in the month of February. Additional operators have been hired or alternate resources have been identified. New staff acquisitions have been trained and process are in place to train new staff as needed. Evaluation of alternative/overlapping shifts will be evaluated if schedule recovery actions are required to hold or recover schedule. The constructability review process will continue as needed.  The majority of the Constructability reviews for the equipment installation will be complete in March 2016. Miscellaneous additions, changes, or redlines are proposed by engineering. No alternative course of actions necessary at this time.</p>	Mitigation action(s)	FC Date	%	Post for additional operation resources.	Complete	100	Train newly added staff.	Complete	100
Mitigation action(s)	FC Date	%											
Post for additional operation resources.	Complete	100											
Train newly added staff.	Complete	100											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																					
		Month	Trend																						
<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> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$512K, 32 days</p>	●	↔	<p><b>Risk Trigger:</b> Planned Activities compete for the same operational resources, and resource limitations emerge resulting in delays.</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> </tbody> </table> <p><b>Mitigation Assessment:</b> No changes in the month of February. Additional operational resources have been hired at T-Plant to support the construction work. The Construction team has hired an additional planner to support work package development, enhanced work planning, and Hazard Review Board presentations. FPE resources have not engaged to fully support NLOP equipment removal planning process. The apparent resource challenges continue due to limited FPE resources and competing priorities causing potential delays in preparation for equipment removal. No alternative course of actions necessary at this time.</p>	Mitigation action(s)	FC Date	%	Post for additional operation resources.	Complete	100	Train newly added staff.	Complete	100												
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Train newly added staff.	Complete	100																							
STP-097-B: Material & Procurement (Review)/ Unexpected Procurement Item Delays - ECRS Annex/In-Basin Equip.	<p>During installation or testing, the "Buyer Furnished Equipment" will require modification and the emergent procurement actions will result in delays to the project. In addition, other latent quality issues are discovered (i.e., NRTL, suspect counterfeit) and procurement of replacement materials or components are required. There is the possibility the STP hoses are not of adequate length and acquisition of new hoses is required.</p> <p><b>Risk Handling Strategy:</b> Control</p> <p><b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$200K, 64 days</p>	●	↔	<p><b>Risk Trigger:</b> 1) During installation or testing, the "Buyer Furnished Equipment" will require modification. 2) Latent quality issues are discovered.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform equipment mock-ups where feasible. (XAGO mock-up complete)</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Evaluate potential bidders and shortlist to 3 potential bidders to procure and modify safety significant equipment as directed by engineering.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Perform equipment installation constructability reviews to minimize field interferences and fit up issues. (In-Basin NE-Corner is in process, In-Basin Equip and Annex Equip reviews are forthcoming)</td> <td>7/31/16</td> <td>20</td> </tr> <tr> <td>Perform equipment installation constructability reviews to minimize field interferences and fit up issues. (In-Basin NE-Corner complete, In-Basin Equip comment resolution in process and Annex Equip reviews are forthcoming)</td> <td>7/28/16</td> <td>0</td> </tr> <tr> <td>Performance of MPAT will help reduce cost and schedule impacts.</td> <td>7/28/16</td> <td>0</td> </tr> <tr> <td>Expedited delivery to recover delays from suppliers. Evaluated on a case-by-case basis.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> This is a reoccurring risks relating to the unexpected/unanticipated procurement of materials and equipment during the ECRS Annex/In-Basin equipment or testing. To date the risk has required the purchase of additional cameras and long reach tools to support construction activities; specialty cutting tools for the EC-230 manifold; camera cable connectors; underwater cameras; camera mounting SS tubing; camera articulation hardware; Nucut system replacement batteries; additional tools and equipment for re-lidding; hose assembly modifications; hydraulic cutting tools; and additional PPE (Anti-C latex gloves).</p> <p>The project continues to identify project needs before they become critical and delay planned work scope. Mitigation actions are expected to reduce the risk likelihood of occurrence, however, the anticipated risk impacts will be unaffected by the mitigation actions. No alternative course of actions necessary at this time.</p>	Mitigation action(s)	FC Date	%	Perform equipment mock-ups where feasible. (XAGO mock-up complete)	Complete	100	Evaluate potential bidders and shortlist to 3 potential bidders to procure and modify safety significant equipment as directed by engineering.	Complete	100	Perform equipment installation constructability reviews to minimize field interferences and fit up issues. (In-Basin NE-Corner is in process, In-Basin Equip and Annex Equip reviews are forthcoming)	7/31/16	20	Perform equipment installation constructability reviews to minimize field interferences and fit up issues. (In-Basin NE-Corner complete, In-Basin Equip comment resolution in process and Annex Equip reviews are forthcoming)	7/28/16	0	Performance of MPAT will help reduce cost and schedule impacts.	7/28/16	0	Expedited delivery to recover delays from suppliers. Evaluated on a case-by-case basis.	On-Going	N/A
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																								
		Month	Trend																									
<b>RL-0012/WBS-012</b>																												
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: Accept</b></p> <p><b>Probability: Low (10% to 25%)</b></p> <p><b>Worst Case Impacts: \$1M, 60 days</b></p>	●	↔	<p><b>Risk Trigger:</b> 1) ECRTS equipment does not operate as expected. 2) Unexpected attrition of critical testing personnel.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>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>Complete</td> <td>100</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>Complete</td> <td>100</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> Personnel are actively managing critical procurements required for MPAT and FAT criteria is 98 percent established. Several actions have been taken to secure commitment from staff. <b>The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified.</b> <b>No alternative course of actions necessary at this time.</b></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.	Complete	100	Consider incentives for key project personnel to ensure their availability during this critical acceptance-testing phase of the project.	Complete	100									
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Establish factory acceptance testing criteria that will provide reasonable confidence that minimal operational surprises will be realized during subsequent MPAT at MASF.	Complete	100																										
Consider incentives for key project personnel to ensure their availability during this critical acceptance-testing phase of the project.	Complete	100																										
STP-111-B: Contractor/ Subcontractor Performance – ECRTS Annex/ In-Basin Equipment Installation	<p>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.</p> <p><b>Risk Handling Strategy: Control</b></p> <p><b>Probability: Very Likely (&gt;90%)</b></p> <p><b>Worst Case Impacts: \$792K, 96 days</b></p>	●	↔	<p><b>Risk Trigger:</b> 1) General Contractor will not be able to comply with all contract requirements.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Contractor pre-evaluation completed and shortlisted 3-potential bidders.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Shortlisted bidders evaluated and placed on Site ESL.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Increased schedule duration for the project effort.</td> <td>Complete</td> <td>100</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>Complete</td> <td>100</td> </tr> <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>Provide additional training.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> Discreet mitigation actions are complete. Additional mitigation actions will continue throughout the project lifecycle. This is a reoccurring risks relating to the contractor performance. <b>No alternative course of actions necessary at this time.</b></p>	Mitigation action(s)	FC Date	%	Contractor pre-evaluation completed and shortlisted 3-potential bidders.	Complete	100	Shortlisted bidders evaluated and placed on Site ESL.	Complete	100	Increased schedule duration for the project effort.	Complete	100	Acquisition planning document written to allow additional work to be added to successful bidder-if their performance is acceptable.	Complete	100	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	Provide additional training.	Ongoing	N/A
Mitigation action(s)	FC Date	%																										
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Implement extensive oversight	Ongoing	N/A																										
Provide additional training.	Ongoing	N/A																										

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
<b>RL-0012/WBS-012</b>													
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> \$1.3M, 48 days	●	↔	<p><b>Risk Trigger Metric:</b> 1) CHPRC 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> No changes in the month of <b>February</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			
Mitigation action(s)	FC Date	%											
None identified at this time.	N/A	N/A											
<b>FY2017 Risk Triggers (Risk could be realized in FY2017)</b>													
STP-105-B: Acceptance Testing and Achieving Readiness - ECRTS Annex/In-Basin Equip. Installation	Acceptance Testing Requirement are different from planned based on the development final of Acceptance Testing Requirements and Lines of Inquiry for Readiness Review.  <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Very Likely (>90%) <b>Worst Case Impacts:</b> \$951K, 32 days	●	↔	<p><b>Risk Trigger Metric:</b> 1) During acceptance testing requirements are different from planned.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct constructability review of Engineering media and field walk-downs as applicable.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Conduct Field mockups of equipment and review of MASF to identify potential interferences</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No additional changes are planned in the month of <b>February</b>. The mitigation strategies have been put in place, as a result, the risk strategy is to accept with no further mitigation actions identified. No alternative course of actions necessary at this time.</p>	Mitigation action(s)	FC Date	%	Conduct constructability review of Engineering media and field walk-downs as applicable.	Complete	100	Conduct Field mockups of equipment and review of MASF to identify potential interferences	Complete	100
Mitigation action(s)	FC Date	%											
Conduct constructability review of Engineering media and field walk-downs as applicable.	Complete	100											
Conduct Field mockups of equipment and review of MASF to identify potential interferences	Complete	100											
<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> \$1.3M, 96 days	●	↔	<p><b>Risk Trigger:</b> 1) An operational upset or spill results in work shutdown at K Basin. This risk will commence in FY2018 and continue throughout project lifecycle until sludge is removed from 105KW Basin.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.</td> <td>10/11/17</td> <td>0</td> </tr> <tr> <td>Conduct testing and training at MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> <b>No changes in the month of February.</b> Forecasted mitigation dates are consistent with overall STP critical path schedule. Training and procedure development will continue into FY2018. It will complete prior to completion of management self-assessment affidavits in December 2017.</p>	Mitigation action(s)	FC Date	%	Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	10/11/17	0	Conduct testing and training at MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.	Ongoing	N/A
Mitigation action(s)	FC Date	%											
Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	10/11/17	0											
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																		
		Month	Trend																			
<b>RL-0012/WBS-012</b>																						
STP-073-C: Processing Efficiency - Retrieval & Shipping, During 1st STSC	<p>The realized processing efficiency associated with sludge retrieval and shipping operations does not match baseline plan.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Low (10% to 25%)</p> <p><b>Worst Case Impacts:</b> \$0K, 8 days</p> <p>*Cost increase will result in cost per day impacts from crews, and hotel load.</p>	●	↔	<p><b>Risk Trigger:</b> 1) Actual processing efficiency associated with sludge retrieval and shipping operations does not match baseline assumptions. This risk will commence in FY2018 beginning with operations campaign.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>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>Test the Design on simulated sludge and test the production hardware to validate operability prior to installation in the 105 KW Basin.</td> <td>Complete</td> <td>100</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>Complete</td> <td>100</td> </tr> <tr> <td>Evaluate alternatives to reduce the total STSC's by optimization of sludge loading.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> No changes in the month of February. 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	Test the Design on simulated sludge and test the production hardware to validate operability prior to installation in the 105 KW Basin.	Complete	100	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.	Complete	100	Evaluate alternatives to reduce the total STSC's by optimization of sludge loading.	Ongoing	N/A
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Evaluate alternatives to reduce the total STSC's by optimization of sludge loading.	Ongoing	N/A																				
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)																						
No unassigned risks identified in the month of February.																						

## 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	13.9	15.1	5.3	1.1	8.0%	9.8	65.1%

Numbers are rounded to the nearest \$0.1 million

#### CM Schedule Performance (+\$1.1M/+8.0%)

The positive schedule variance from In Basin Mod and Re-Lid Engineer Container of \$300k is due to the general contractor meeting their Firm Fixed Price (FFP) schedule and ahead of the baseline. The additional \$700K positive schedule variance is from the point adjustment from changing construction management and procurement support accounts from apportioned effort to Level of Effort (LOE). This change was implemented in February via BCR-12C-16-010R0, "Correct RL-012 CAP 15-D-4021 Sludge Treatment Project (STP) Baseline Planning Errors and Coding Updates."

#### CM Cost Performance (+\$9.8M/+65.1%)

The positive cost variance is due to the addition of scope from REA 12-1519, "STP Sequestration Impacts" (BCR-012C-16-007R0) which increased BCWS and BCWP by \$9 million. Actual costs were incurred at the time of sequestration in FY2013 and FY2014 (due to restart of FFP construction contractors). Additional positive cost variance is related to T-Plant NLOP Removal Construction/ PM and CM support from savings associated to contractor providing a partially trained workforce which reduced training costs in addition to reduced requirements for PPE. Relidding fieldwork was completed under budget due to negotiating a firm fixed price contract for less than the budgeted value (contract change orders are still being negotiated).

## 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	554.5	555.3	556.9	0.8	0.2%	(1.6)	-0.3%	722.4	719.6	2.7

Numbers are rounded to the nearest \$0.1 million

#### CTD Schedule Performance (+\$0.8M/+0.2%)

The variance is within reporting thresholds.

#### CTD Cost Performance (-\$1.6M/-0.3 %)

The variance is within reporting thresholds.

#### Variance at Completion (+\$2.7M/+0.4%)

The variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

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

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	53.0	47.5	5.5
Incremental Scope Pending Change Management	0	0.6	(0.6)
Subtotal	53.0	48.1	4.9
Line Item	68.1	33.9	34.2
<b>RL-0012 – Total</b>	<b>121.1</b>	<b>82.0</b>	<b>39.1</b>

Numbers are rounded to the nearest \$0.1 million.

### Funds/Variance Analysis

FY2016 projected funding for RL-0012 is \$121.1 million. The projected overrun in expense funding shown in previous months has been alleviated. 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

BCR-012C-16-007R0, *Definitization of REA-12-1519 STP Sequestration Impacts*  
 BCR-012-16-009R0, *Implementation of PBS RL-0012 Operating Expense Schedule Health Corrections*  
 BCR-012C-16-010R0, *Correct RL-0012 CAP 15-D-401 Sludge Retrieval Project Baseline Planning Errors and Coding Updates*

## 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)

February 2016  
CHPRC-2016-02, 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 formwork, rebar, embed, and electrical grounding installation for K3N ventilation skid pad foundation. T Plant replaced ~200 crane rail clips on 221T 45 ton crane. CWC continued waste box nondestructive assay (NDA) activities in the Outside Storage Area (OSA) A. ERDF Transfer Pipeline Construction completed four of six road crossings.

## 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	95%
16-EMS-WFM-OB1-T2	Improve consistency in RCRA inspections between WFM facilities.	Establish consistent format, language, approvals, and corrective action tracking standards for WFM RCRA inspections.	9/30/16	40%
16-EMS-WFM-OB1-T3	Improve consistency in recordkeeping for RCRA inspections at CWC.	Evaluate and issue procedure for an automated RCRA Checklist and inspection system for CWC.	9/30/16	30%

## 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	0	25*	N/A *8 First Aid Cases, PTS in support of RL-0013.
Near Misses	0	1	N/A

## KEY ACCOMPLISHMENTS

### 13.01 Project Management

- o Provided Clean Closure Certification for FS-1 to RL for transmittal to Ecology.

### 13.02 Capsule Storage & Disposition

- o Performed/Completed:
  - Testing of recently installed alarm auto dialer.
  - 30 Preventive Maintenance (PM) work packages.

#### a. Capsule Extended Storage Project:

- Received RL authorization for issuance of the Request for Proposal (RFP).
- Capital Determination has been reviewed and concurred with by DOE-HQ.

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

- Obtained occupancy for construction trailers.
- Completed formwork, rebar, embed, and electrical grounding installation for K3N ventilation skid pad foundation.
- Received 28-day draft Radioactive Emissions License from WDOH for review.
- Completed backfill of underground fire suppression piping.
- Poured concrete into completed formwork for core drill mockup.

### 13.03 Canister Storage Building (CSB)

- o Performed/Completed:
  - Hanford Site Lockout/Tagout DOE-0336 Revision 2A Training.
  - 21 PM packages.

### 13.06 TRU Repackaging

- o Transuranic mixed (TRUM) waste completed and returned fiscal year to date – 285.3 m3.
- o M-91 Alternative Study:
  - Conducted brainstorming sessions with Subject Matter Experts to determine potential alternatives for waste retrieval, characterization, repackaging, and transportation.

### 13.07 WRAP

- o Received 22 waste drums in seven shipments.
- o Surveillances/PMs:
  - 138 Surveillances.
  - 12 PM packages.

### 13.08 T Plant

- o Completed replacement of ~200 crane rail clips on 221T 45 ton crane.
- o Surveillances/PMs:
  - 477 Surveillances.
  - 20 PM packages.

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

- o Performed/Completed:
  - Waste box NDA activities in the OSA A, six of ten boxes completed.
- o Surveillances/PMs:
  - 28 PM packages.
  - 331 Surveillances.
- o Shipped:
  - Seventeen waste drums to PFNW in two shipments.
- o Shipments Received:
  - Sixteen standard waste boxes (SWB) received into CWC in four shipments.
  - Thirty-three waste drums received into CWC in five shipments.

### 13.11 Liquid Effluent Facilities

- o ERDF Transfer Pipeline Construction:
  - Completed four of six road crossings.

- Continued new HDPE line installation.
- 13.12 Integrated Disposal Facility**
  - o Completed monthly inspections.
- 13.14 Solid Waste Base Operations**
  - o Environmental Enhancement:
    - Completed data reconciliation/containers labeled: 720 drums.
    - Submitted Statement of Work and Functional Requirements Document in Asset Suite.
- 13.16 Off Site Spent Nuclear Fuel Disposition**
  - o Maintained coordination for offsite Spent Nuclear Fuel Disposition.
- 13.21 Mixed Waste Disposal Trenches (MWT)**
  - o Shipments Received:
    - Eleven waste boxes and two waste drums in three shipments.
  - o Completed:
    - 153 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). Additional repackaging scope was incorporated into the contract and performance measurement baseline in October 2015. However, regulator interest continues regarding container condition and CHPRC is monitoring evolving requirements along with RL.

### Issue:

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

### Corrective Action:

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

### Status:

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

presentation for release, and the cleared copies were provided to WDOH on October 22, 2015. WDOH provided positive feedback on the PNNL presentation but wants one of six original tests to be re-performed but at lower flow rates to validate the PNNL statistical analysis, which used test results from similar stacks for comparison. 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. Once direction is received from RL for the additional testing, work packages will be developed and the testing will be scheduled.

PNNL was given direction to proceed with preparation of their formal report December 1, 2015, with an anticipated completion date of February 26, 2016. PNNL submitted a cleared copy of their final report, "Stack Flow Rate Changes and the ANSI/N13.1-1999 Qualification Criteria – Application to the Hanford Canister Storage Building Stack", to CHPRC for on February 18, 2016. The purpose of this report examines qualification test results of four stacks that are geometrically similar to the CSB and uses the test data from those stacks as a basis for qualifying the CSB stack at flow rates lower than what the CSB stack was originally qualified at.

**Issue:**

The Canister Storage Building 2902HV-82 Fire Pump Flow Test Meter is not a Factory Mutual (FM) approved meter for the two fire water pumps. The primary source of fire water for both CSB/ISA and 2704 HV complex is the loop supplied by the raw water system. In addition, a secondary fire water supply using the water storage tank north of CSB has been part of the overall fire water system for a number of years. The fire water pumps for this system require annual testing to confirm that pump performance has not degraded over time. The existing flow meter used for that annual performance test is not FM approved (required for fire pumps), but use was approved by RL (re: equivalency test per RL letter dated Aug 2012). That RL equivalency imposed additional testing requirements. Testing performed in 2014 to comply with those requirements was not satisfactory and led to the decision to replace the flow meter with a FM approved meter in order to remove the requirement for the DOE equivalency.

**Corrective Action:**

A FM approved flow meter was procured for in-place replacement of the existing meter; however, when received it was determined that the meter was not satisfactory (was not able to satisfy accuracy and repeatability requirements). The meter was returned to the vendor, and the vendor was not able to provide a suitable meter over a period of months. In the meantime, the Annual Fire Water Pump Testing PM was extended to May 1, 2016, under the assumption a suitable meter would be provided and installed before expiration of this extension.

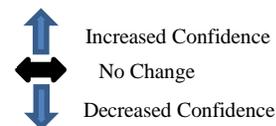
**Status:**

Engineering is in the process of specifying a new meter that will require modification to and installation in the piping. In parallel, CHPRC Fire Protection Engineering is evaluating the code requirements and need for the fire water tank and system. Communication with the Hanford Fire Marshal and the RL Fire Protection Subject Matter Expert (SME) is in on this subject and the potential for eliminating the fire water tank system is planned upon completion of the fire code analysis.

## 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>February</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: 24px;">●</span>	<span style="font-size: 24px;">↔</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;">11/01/11</td> <td style="text-align: center;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Manage a "watch-list" of waste containers that have shown signs of degradation or are associated with degraded containers.</td> <td style="text-align: center;">On-Going</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Overpack degraded waste packages.</td> <td style="text-align: center;">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 container surveillances in the month of <b>February</b> to identify container and container cover abnormalities. All shipments related to the 280 m3, largely from Outside Storage Area A, to <b>Perma-Fix Northwest are complete and returned to CWC/LLBG</b>. A contract was awarded for the design and fabrication of a large overpack for storage box 75DMA16F3 with a subsequent move into 2403WD. The new delivery date is <b>March 30, 2016</b>. The <b>two week</b> slip results in no additional impacts to the project at this time.</p> <p>A potential impact may be realized due to regulator uncertainties related to the definition of a satisfactory container when corrosion is evident. These uncertainties may result in the inability to efficiently receive waste from on-site generators, i.e., PFP. At this time impacts are being realized in two buildings for the receipt of PFP CERCLA waste. No alternative course of actions needed at this time; however, a teleconference with the EPA was held and no final determination was made by the regulators on the definition of a "good drum." CHPRC is in possession of a letter from the EPA that states they do not believe CHPRC understands what a "bad drum" is. No meetings are currently schedule to resolve this concern, however a letter is being drafted to request contract direction from RL. At this time it is undetermined on the timeframe to reach a conclusion.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	11/01/11	On-Going	N/A	Manage a "watch-list" of waste containers that have shown signs of degradation or are associated with degraded containers.	On-Going	N/A	Overpack degraded waste packages.	On-Going	N/A	Process waste packages at a rate funded by RL.	On-Going	N/A
Risk recovery action(s)	Risk Date	FC Date	%																		
Perform daily/weekly waste container surveillances to identify container abnormalities.	11/01/11	On-Going	N/A																		
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																		

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="2" 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></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 was transmitted to RL January 14. Any issues with closure performance standards will be resolved during public comment period. Temporary Authorization (TA) to perform construction activities were requested along with the certified closure plan and Part A with approval of TA requested by March 31, 2016 to avoid impacting schedule. CHPRC and RL met with Ecology on February 9, 2016 to discuss a phased approach instead of 1 TA for the full scope requested. The first TA would allow core drilling; the second TA would allow grouting. This approach poses additional schedule risk if Ecology does not issue TAs in time to support field work, and may prolong an interim condition where core drills have been made but grout not placed if the second TA is not issued in time. 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
Risk recovery action(s)	Risk Date	FC Date	%																
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																				
		Month	Trend																					
<b>RL-0013/WBS-013</b>																								
WSD-W130-17: Changes in the final design are needed after the design is issued	<p>Changes in the final design are needed after the design is issued. Changes are driven by unexpected conditions, additional reviews of the design media, or field conditions. Design changes result in cost impacts and schedule delays.</p> <p><b>Risk Handling Strategy:</b> Control</p> <p><b>Probability:</b> Medium (26% to 74%)</p> <p><b>Worst Case Impacts:</b> \$550K, 112 days</p>			<p><b>Risk Event:</b> Risk was realized when additional reviews of design media and K3N ventilation skid as-built conditions were analyzed during writing of test and operating procedures. Four separate issues have led to the realization of this risk:</p> <ol style="list-style-type: none"> <li>1) Changes in fire suppression system design are necessary to allow leak testing of the full system due to limitations in the existing skid design.</li> <li>2) K3N skid requires modifications to ensure proper operation at WESF.</li> <li>3) Hot cell penetration sealing requires more work than planned.</li> <li>4) Communication between hot pipe trench in WESF and B Plant causes grout to flow into B Plant during trench grouting.</li> </ol> <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>Provide revised design for fire suppression system</td> <td rowspan="5" style="text-align: center;">02/01/16</td> <td>2/26/16</td> <td>100</td> </tr> <tr> <td>Complete fabrication and installation of new fire suppression system</td> <td>TBD</td> <td>TBD</td> </tr> <tr> <td>Provide design for K3N skid modifications</td> <td>3/15/16</td> <td>80</td> </tr> <tr> <td>Complete K3N skid modifications</td> <td>4/15/16</td> <td>0</td> </tr> <tr> <td>Perform electrical investigations in service gallery</td> <td>6/14/16</td> <td>0</td> </tr> </tbody> </table> <p><b>Recovery Action Assessment:</b> A revised design has been provided for the fire suppression system changes that will allow for pressure testing of the full system. The revised design resulted in a 10 foot expansion of the K3N skid foundation pad to allow for the extra spool piece required for insertion of the sprinkler head in the ducting upstream of the filters. The contractor will provide the spool piece and the sprinkler upon delivery of the skid to WESF for installation. A revised design is in the approval process for the modifications necessary to the K3N skid. The contractor is in the process of providing a cost and schedule proposal. Work packages are being planned for electrical investigations in the service gallery. Work will commence after the work packages are approved by the Hazard Review Board due to high radiological hazards. A small one inch core into the hot pipe trench will be performed to insert a borescope and temperature probe to determine if open communication exists between the two facilities.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Provide revised design for fire suppression system	02/01/16	2/26/16	100	Complete fabrication and installation of new fire suppression system	TBD	TBD	Provide design for K3N skid modifications	3/15/16	80	Complete K3N skid modifications	4/15/16	0	Perform electrical investigations in service gallery	6/14/16	0
Risk recovery action(s)	Risk Date	FC Date	%																					
Provide revised design for fire suppression system	02/01/16	2/26/16	100																					
Complete fabrication and installation of new fire suppression system		TBD	TBD																					
Provide design for K3N skid modifications		3/15/16	80																					
Complete K3N skid modifications		4/15/16	0																					
Perform electrical investigations in service gallery		6/14/16	0																					
<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	MLLW & TRU treatment capacity/capability does not meet Hanford needs or treatment does not occur as scheduled, resulting in cost impacts. <b>Risk Handling Strategy:</b> Accept  <b>Probability:</b> Very Low (<10%) <b>Worst Case Impacts:</b> \$10 million, 0 day			<b>Risk Trigger Metric:</b> Will continue throughout contract (September 30, 2018).															
				<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>50</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>	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	50	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
				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	50													
				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																	
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<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. PFNW has identified and prepared one of their buildings for processing of non-mixed TRU waste, however they are holding any further readiness until CHPRC can more specifically identify when the oversized non-mixed TRU waste components from PFP will begin to be shipped.																			
Current alternative course of action: To minimize potential impacts to PFP, the plan is to send the PRF Canyon Floor waste to CWC for interim storage, and then gradually ship the waste packages to PFNW for processing as license limits permit. However by doing this, RL-0013 will assume the regulatory risk associated with the waste (i.e., more stringent requirements under RCRA at CWC compared to under CERCLA at PFP); additionally, it will still load up PFNW with respect to their Pu limits for several years which will significantly limit the shipment of other Pu containing waste (i.e., legacy large container TRU/M waste) to PFNW for processing.																			
<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	T Plant suffers a major equipment failure (crane, primary power supply, etc.), 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> \$2M, 33 days			<b>Risk Trigger Metric:</b> During planned S&M activities a suspect system component is discovered that requires attention, or an unexpected malfunction results in this risk from being realized. This risk will continue throughout the CHPRC (September 30, 2018).															
				<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>	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>Mitigation Assessment:</b> The mitigation strategies have been put in place (i.e., aggressive S&M activities), as a result, the risk strategy is to accept with no further mitigation actions. Work to repair/replace the Crane rail clip is complete. The crane is currently operational. No alternative course of actions needed at this time.																			

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> \$1.5 million, 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>February</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> \$32 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>February</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-W130-18: 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>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> No change in the month of <b>February</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	%	Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.	9/30/16	0	Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.	9/30/16	0
Mitigation action(s)	FC Date	%											
Compare actual grout fill volume with estimated value to determine if hot pipe trench has been filled.	9/30/16	0											
Fill hot cells in 3 foot lifts to minimize sudden stress by allowing partial curing between lifts, as well as early detection of hot cell floor failure.	9/30/16	0											
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>													
No unassigned risks identified in the month of <b>February</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	8.6	7.6	(0.1)	-1.6%	1.0	11.8%

Numbers are rounded to the nearest \$0.1 million

#### CM Schedule Performance (-\$0.1M/-1.6%)

The current month schedule variance is within threshold.

#### CM Cost Performance (+\$1.0M/+11.8%)

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	1,025.3	1,024.6	962.0	(0.8)	-0.1%	62.6	6.1%	1,332.7	1,260.0	72.7

Numbers are rounded to the nearest \$0.1 million

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

The schedule variance is within threshold.

#### CTD Cost Performance (+\$62.6M/+6.1%)

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

#### Variance at Completion (+\$72.7M/+5.5%)

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

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

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

WBS 013/RL-0013 Waste and Fuels Management Project	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	106.6	86.7	19.9
Incremental Scope Pending Change Management	0.0	16.4	(16.4)
RL-0013 – Total	106.6	103.1	3.5

Numbers are rounded to the nearest \$0.1 million.

### Funds/Variance Analysis

FY2016 project funding for RL-0013 remained the same. The FYSF was decreased from \$104.8 million to \$103.1 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-013-16-016R0, *Definitization of REA 013 1538, 231-Z-D-R-11 Concrete Box Mitigation*  
 BCR-013-16-018R0, *RL-0013 Incorporation of Schedule Health Modifications to IMS*  
 BCR-PRC-16-029R0, *Undistributed Budget Adjustments February 2016*

## 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
C-026-07J	Tritium Treatment Technology Development to Ecology and EPA	3/31/16	2/23/16	--	Completed
M-091-03J	Submit Revision of TRUM Waste and MLLW PMP to Ecology.	6/30/16		6/30/16	On Schedule
M-091-47B	Certify or treat 280 cubic meters of TRUM/MLLW waste in FY2016. Submit a change request to establish the next two interim milestones for annual certification of TRUM waste and disposal of MLLW.	9/30/16		9/30/16	On Schedule
M-091-51	Submit secondary document for new or modified facilities to process all Hanford Site RH TRUM waste.	9/30/16		9/30/16	On Schedule
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

February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

P&T Operations continued making progress on the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial process documentation for the RCCC. Groundwater treatment and well drilling completed in February includes the following:

Treatment Facility	Million Gallons Treated		Chrome (kg)		Carbon Tet (kg)		Nitrate as N (kg)		Tech-99 (pCi)		Uranium (kg)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX P&T	32.4	166.5	5.4	32.5								
HX P&T	18.4	95.0	1.8	10.7								
KR-4 P&T	13.6	65.4	0.3	1.4								
KW P&T	13.5	71.5	0.6	4.0								
KX P&T	34.8	178.1	2.0	11.0								
200 West P&T	74.8	404.7	6.7	31.7	176	952	7713	38034	.24x10 <sup>12</sup>	1.3x10 <sup>12</sup>	2.2	10.7
<b>Combined</b>	<b>187.6</b>	<b>981.3</b>	<b>16.7</b>	<b>91.4</b>	<b>176</b>	<b>952</b>	<b>7713</b>	<b>38034</b>	<b>.24x10<sup>12</sup></b>	<b>1.3x10<sup>12</sup></b>	<b>2.2</b>	<b>10.7</b>

Well Drilling by Area	FY2016 Planned	February	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>
<b>Site Wide Boreholes</b>	<b>24</b>	<b>-</b>	<b>7</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%	42%
		Compile 2 <sup>nd</sup> quarter emissions evaluation.	3/31/16	66%	
		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	25%	25%
16-EMS-SGWR-OB4 Reduce the risk of noncompliance with environmental requirements.	T1 – Develop compliance matrices for S&GRP P&T facilities CERCLA RD/RAWPs.	Identify implementing mechanisms and gaps for environmental requirements (i.e., requirement matrices) for the following RD/RAWPs: DOE/RL-96-84, Revision 0 and 0-A, DOE/RL-2006-52, DOE/RL-2006-75, and DOE/RL-2008-78.	9/30/16	18%	18%

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	3	47 *	<ul style="list-style-type: none"> <li>2/3/2016 – As the employee was pulling a rope up the river embankment, the hose suddenly stopped and the individual felt a slight pull in their calf. The individual was taken to the 200 West first aid station for evaluation and released to work without restriction. (23930)</li> <li>2/16/2016 – Employee began to experience pain in left knee when entering and exiting the government vehicle. The vehicle was higher than the previous vehicle the individual was driving and would tweak her knee while getting into the truck. The employee was taken to HPMC, treated with ice for a sprain/strain and returned to work without restriction but with the recommendation to find a lower vehicle to utilize. (23935)</li> <li>2/24/2016 - Employee expressed that they had been experiencing some pain in the right hand when doing certain job functions. Notifications were made and employee was taken to HPMC for further evaluation. Employee was released to work without restrictions. (23940)</li> </ul> <p>*13 FA cases, PTS in support of RL-0030.</p>
Near-Misses	0	2	N/A

## KEY ACCOMPLISHMENTS

### RL-0030.O1 RL 30 Operations

#### RL 30 Integration & Assessments

#### Risk & Modeling Integration

- Received letter on February 9, 2016 from Ecology announcing that Ecology will restart their review of the 200-BP-5 Remedial Investigation Report and the 200-PO-1 Remedial Investigation Report. The letter also stated that the completion of the review is contingent on RL providing “adequate details” on how the modeling approach evolved from the TC&WM EIS modeling approach. Met with Ecology on February 10, 2016, and defined a set of four workshops to provide those details. The first workshop will occur in early March and address the topic of geology framework basis of the models.
- Supported the Low-Level Waste Disposal Facility Federal Review Group (LFRG) review of the WMA C Performance Assessment in February. The meetings focused on wide variety of subjects including site and facility characteristics, inventory, radionuclide screening, waste characteristics, major assumptions, site safety functions, conceptual site model (source-term, engineered features, vadose zone, and groundwater), modeling, software QA and intermediate results.

**Environmental Data Integration**

- The Hanford Site Waste Management Units Report (HSWMUR), also known as the annual WIDS report, was posted online on February 18, 2016, completing TPA Commitment C-010-025.

**RL-0030.01 RL 30 Operations****River Corridor****100-BC-5 Operable Unit**

- Notified RL via letter that the 2-year remedial investigation groundwater sampling was completed on January 12, 2016. This sampling completed the requirements for TPA Milestone M-015-78.
- Performed the following key activities as part of the RI/FS:
  - Presented initial results of conceptual site model for hexavalent chromium and strontium-90 to RL on February 3, 2016.
  - Completed the conceptual site model for strontium-90.
  - Completed preliminary flow and transport modeling for the groundwater remedial alternatives.
- Finalized the FS remedial alternatives.

**100-FR-3 Operable Unit**

- Initiated road and pad installation for the upcoming 8 monitoring well drilling campaign.

**100-HR-3 Operable Unit**

- Completed submittal of revised FY2016 P&T optimization work scope and completion criteria to RL.
- Completed submittal of revised cultural review requests for planned FY2016 well realignment activities.
- Completed well drilling for 2 of 7 WCH replacement wells.
- Presented the Remedial Process Optimization strategy document to RL on February 22, 2016.

**100-KR-4 Operable Unit**

- Presented the soil and groundwater contamination results from the borings in the vicinity of 105-KE Reactor to RL.
- Completed submittal of revised FY2016 P&T optimization work scope and completion criteria to RL.
- Completed submittal of revised cultural review requests for planned 2016 well realignment activities.
- Presented the results of PNNL's evaluation of the pH effects upon contaminant mobility to RL on February 18, 2016.

**100-NR-2 Operable Unit**

- Provided preliminary responses to Ecology comments on the interim RD/RAWP, O&M plan, and SAP to RL.

**300-FF-5 Operable Unit**

- Issued the post-job review for installation and operation of the Stage A uranium sequestration system on February 18, 2016.
- Submitted the Technical Memo for completion of the Stage A uranium sequestration to RL on February 22, 2016, which completes PM-30-5-16.

**Central Plateau****200-BP-5 and 200-PO-1 Operable Units**

- Submitted the Decisional Draft 200-BP-5 Treatability Test Report to RL for review on February 22, 2016. Briefed Ecology on the results of the test February 18, 2016.

**200-UP-1 Operable Unit**

- Completed drilling the first (299-W19-116) of four groundwater monitoring wells.
- Incorporated additional RL comments into the 200-UP-1 OU waste management plan and provide the document to RL for signatures on February 11, 2016.

**200-IS-1 Operable Unit**

- Initiated 23 new waste site scoping summaries and completed 58 scoping summaries.
- Resolved informal Ecology comments on the RI/FS work plan, Chapter 2 on February 25, 2016.

**PW-1/3/6 Operable Unit**

- Met with RL and EPA on February 22, 2016, to discuss the proposed comment responses for the 200-CW-5 and 200-PW-1/3/6 RD/RAWP Draft A. EPA requested alternative responses in six areas and RL was in general agreement with the requested changes.

**200-WA-1 Operable Unit**

- Provided responses to EPA comments on the Draft B RI/FS work plan for RL review on February 24, 2016.

**200-DV-1**

- Initiated installation of the instrument array in the first deep vadose zone treatability test borehole (C9520) to be completed as a vadose zone monitoring well on February 24, 2016.
- Completed sonic drilling at boreholes C9550, C9549, C9552, and C8706. Electrodes have been installed in three of these boreholes.
- Completed operational acceptance testing on the new perched water system in February. The first of three perched water tests to operate each of the three extraction wells for one hour was successfully initiated on February 18, 2016, and is followed by a month of non-operation to collect hydraulic recovery and baseline data. The second test will begin approximately one month later.

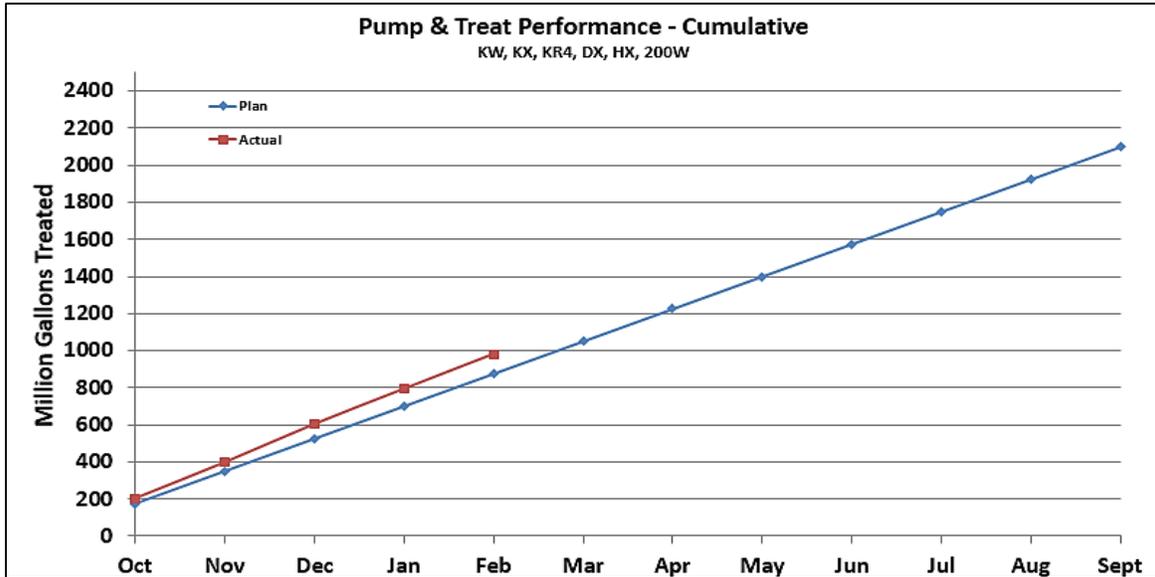
**Groundwater P&T Facilities****200 West P&T**

- Operated the 200 West P&T at an average of 1,791 gpm.

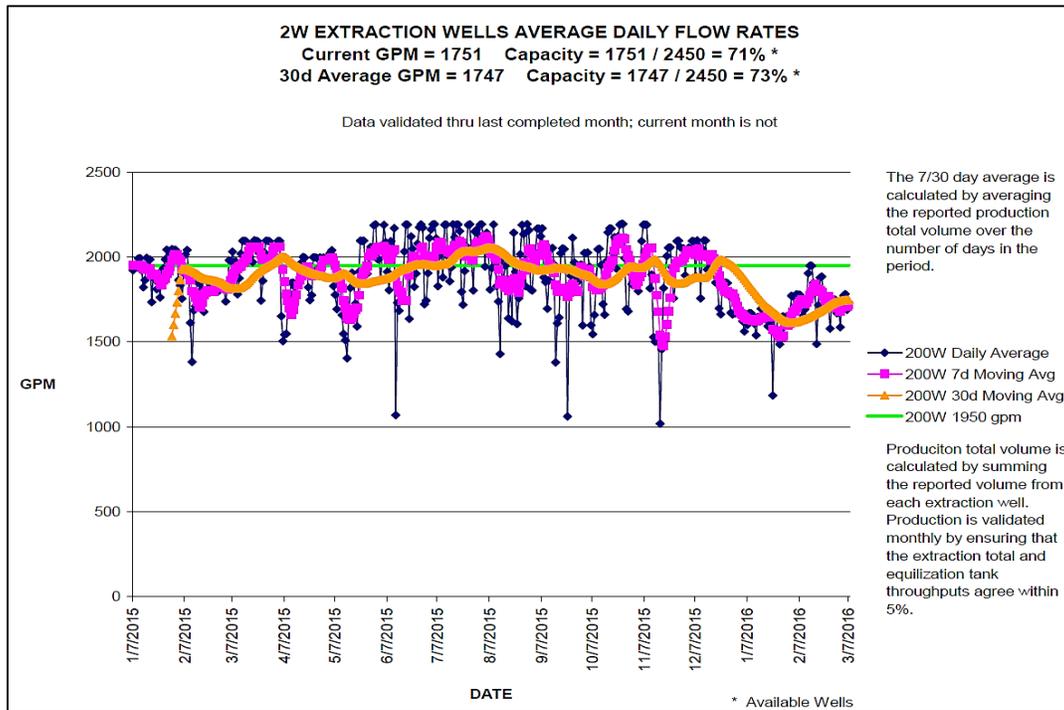
**100 Area P&Ts**

- Operated the DX P&T at 776 gpm, above the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 327 gpm, near the facility capacity of 330 gpm.
- Operated the KW P&T at 324 gpm, near the facility capacity of 330 gpm.
- Operated the KX P&T at 832 gpm, near the facility capacity of 900 gpm.
- Operated the HX P&T at maximum extraction well capacity. Monthly average at approximately 441 gpm.

### FY2016 P&T Operations



### 200 West P&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. RL discussed issue during the February monthly meeting. Follow on meeting with YN to be scheduled by RL.

**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:**

The MOAs for drilling the 6 new monitoring wells and D&D of the 100-NR-2 P&T facility are approved. The project is working with RL to implement the associated mitigation measures (issued closed). For the 100-HR-3 and 100-KR-4 OUs, the FY2016 P&T optimization scope was revised to only include activities that occur outside of the TCP. RL discussed working within the TCP with the Tribes during the February monthly meeting. Follow-on meeting was requested by the Yakama Nation to occur in late March.

**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: Resolution of EPA legal comments on the proposed plan (PP) continues. An approach to evaluate the waste sites that were remediated after completion of the RI/FS in the PP has been determined, which will delay completion of the PP by several months.
- 100-NR-2: The regular weekly comment resolution meetings with Ecology on the RI/FS were not held in February due to regulator staff availability.
- 200-IS-1: Ecology continues to review change package C-13-01, which was provided to them on December 19, 2015. Dispute has been extended to March 31, 2016.
- 200-BP-5 and 200-PO-1: Ecology resumed review of the 200-BP-5 and 200-PO-2 remedial investigation reports (letter 16-NWP-030, dated February 9, 2016). According to the letter, completion of this review is contingent upon RL providing “adequate details” on how the modeling

approach evolved from the Tank Closure & Waste Management EIS model to the CERCLA model. Workshops to discuss this modeling are being scheduled.

**Issue:**

An issue was identified regarding soil screening levels and preliminary remediation goals for 100-F/IU and 300 Area waste sites. A calculation is made that requires these values be scaled by the length of the waste site in the direction of groundwater flow. In the case of 100-F/IU and 300 Area the values were applied without this scaling.

**Corrective Action:**

Reevaluate all sites from the RI/FS to confirm no exceedances exist. Path forward to be documented in UMM minutes.

**Status:**

All sites were reevaluated in the RI/FS (pre-ROD) and post-ROD as documented in CVPs and there were no exceedances for any of the sites. Held a meeting with EPA and RL on February 18, 2016, to brief EPA on the issue, impact to 100-F/IU, and proposed action. EPA staff agreed with RL and CHPRC that this likely constitutes a non-significant change for the ROD because no waste sites change status after the correction, but errata materials and revised calculations will need to be included in a change package. A path forward has been established to update the documentation to reflect the change. (Issue closed).

## 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-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 <b>February</b> .																
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)																
<b>OPPORTUNITY:</b> SGW-007A: Sampling Requirement Reduction	Reduction in field sampling (locations, frequency, or total number of samples collected) has the opportunity to reduce <b>long-term groundwater monitoring</b> cost. <b>Risk Handling Strategy:</b> Exploit  <b>Probability:</b> Medium (26% to 74%)  <b>Worst Case Impacts:</b> \$3 million, 0 day			<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;"> <thead> <tr> <th>Opportunity action(s)</th> <th>FC Date</th> <th>%</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>Complete</td> <td>100</td> </tr> <tr> <td>Obtain Agency approval of the revised SAPs.</td> <td>9/30/16</td> <td>50</td> </tr> </tbody> </table> <b>Opportunity Assessment:</b> All ten CERCLA groundwater monitoring SAPs have been revised and transmitted to RL. Five of the ten CERCLA SAPs have been approved by the Agencies and the revised monitoring program implemented. Comment resolution with the Agencies is on-going for two CERCLA SAPs (100-HR-3, and 100-NR-2). It is expected that these SAPs will be finalized within the next couple of months. The 100-NR-2 SAP has been provided to Ecology for final checking. The 100-KR-4 SAP is expected to be transmitted to EPA by the end of March 2016. Ecology will resume review of the 200-BP-5 and 200-PO-1 SAPs following their review of the RI reports. The schedule for this review is uncertain at this time (see Major Issues Section).  All 24 RCRA monitoring plans have been revised and transmitted to RL. Thirteen of the RCRA monitoring plans are complete, and eleven have been implemented. Two of the RCRA monitoring plans are in Ecology review. Resolution of Ecology comments is on-going for the remaining nine RCRA groundwater monitoring plans. Finalization of the revised RCRA monitoring plans is dependent upon Ecology's review schedule.  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.	Complete	100	Obtain Agency approval of the revised SAPs.	9/30/16	50
Opportunity action(s)	FC Date	%														
Develop schedule for completing RL Panel Review on the SAPs.	Complete	100														
Obtain RL approval of the revised SAP.	Complete	100														
Obtain Agency approval of the revised SAPs.	9/30/16	50														
<b>PRC-005: Delayed Document Approvals</b>	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			<b>Risk Event:</b> Progress on several key decision documents have been delayed due to regulator comments and resource availability: <ol style="list-style-type: none"> <li>a) 100-D/H PP: Ecology's comments on the draft Revision 0 100-D/H PP were not received within 30 days of transmittal (September 2014). As a result, it is not possible to complete the document within the timeframe identified in the TPA without extensions.</li> <li>b) 100-N RI/FS: Ecology comments on the Draft A 100-N RI/FS and PP were not received within 45 days of transmittal (June 2013). As a result, it is not possible to complete the document within the timeframe identified in the TPA without extensions.</li> <li>c) 200-IS-1 RI/FS Work Plan (WP): RL invoked dispute resolution on December 10, 2013, for Tri-Party Agreement milestone M-015-112, Submit Draft B 200-IS-1 OU RI/FS WP. Resolution of this dispute, which includes the 200-IS-1 OU waste sites and TSD/past practice status, is required before the Draft B RI/FS WP can be submitted.</li> <li>d) 200-BP-5/PO-1 RI: 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> </ol>												

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																				
		Month	Trend																					
<b>RL-0030/WBS-030</b>																								
				<table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.</td> <td>Sept 2014</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Resolution with Ecology on Draft A 100-N RI/FS Report.</td> <td>June 2013</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.</td> <td>Dec 2013</td> <td>4/30/16</td> <td>N/A</td> </tr> <tr> <td>Resolution with Ecology on the Draft A 200-BP-5/200-PO-1 RI Report</td> <td>Oct 2015</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Risk Assessment:</b></p> <ul style="list-style-type: none"> <li>a) 100-D/H PP: Comment resolution meetings continue with EPA, Ecology and RL. An approach has been established to evaluate the 104 D/H waste sites that were remediated following completion of the RI/FS.</li> <li>b) 100-N RI/FS: No comment resolution meetings occurred during February due to Ecology's staff availability. The current document extension is to March 31, 2016 (15-NWP-225).</li> <li>c) 200-IS-1 RI/FS WP: Ecology continues to review the revised change package C-13-01, which was submitted to Ecology on December 19, 2015. TPA milestone negotiations require one month following change package C-13-01 agreement. The dispute resolution period has been extended to March 31, 2016.</li> <li>d) 200-BP-5/200-PO-1 RI: Ecology resumed review of the 20-BP-5 and 200-PO-2 remedial investigation reports. Completion of this review is pending adequate resolution of Central Plateau modeling approach.</li> </ul>	Risk recovery action(s)	Risk Date	FC Date	%	Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.	Sept 2014	Ongoing	N/A	Resolution with Ecology on Draft A 100-N RI/FS Report.	June 2013	Ongoing	N/A	Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.	Dec 2013	4/30/16	N/A	Resolution with Ecology on the Draft A 200-BP-5/200-PO-1 RI Report	Oct 2015	Ongoing	N/A
Risk recovery action(s)	Risk Date	FC Date	%																					
Resolution with Ecology/EPA on Draft Revision 0 100-D/H PP.	Sept 2014	Ongoing	N/A																					
Resolution with Ecology on Draft A 100-N RI/FS Report.	June 2013	Ongoing	N/A																					
Complete waste site scope definition and dispute resolution with Ecology on Draft B 200-IS-1 RI/FS.	Dec 2013	4/30/16	N/A																					
Resolution with Ecology on the Draft A 200-BP-5/200-PO-1 RI Report	Oct 2015	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 February.																								
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)																								
No high risks identified in the month of February.																								
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)																								
No unassigned risks identified in the month of February.																								

## 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	11.2	8.8	8.9	(2.4)	-21.0%	(0.1)	-1.0%

Numbers are rounded to the nearest \$0.1 million.

#### CM Schedule Performance (-\$2.4M/-21.0%)

The negative schedule variance resulted from the following:

- Drilling campaigns in 200-PO-1 and 200-UP-1 Operable Units have been deferred to align with priority list and available funding.
- Mobilization of the three SE chrome plume drilling campaign has proceeded more slowly than planned to align with driller equipment availability and SAP/WMP updates.
- 200-ZP-1 Operable Unit drilling planned in FY2016 was accelerated and performed in FY2015. The positive variance is now returning to zero.
- Delays to the 100-HR-3 proposed plan finalization have affected the RD/RAWP that was planned in February.
- Revised cultural review requirements for 100-HR-3 and 100-KR-4 well realignment activities have caused the FY2016 construction work to be re-sequenced for later in the year.
- The purchase of a purgewater truck planned in FY2016 has been deferred to align with the priority list and available funding.
- In the fall of 2012, RL and the Regulators made a decision to defer the selection of a preferred 100-KR-4 alternative to allow ongoing source removal activities to be completed, to monitor the response of this remediation on concentrations of contamination within the groundwater system and the interaction of groundwater to the Columbia River, and perform additional vadose zone characterization. These delays to the documentation process have delayed the start of the RD/RAWP planned in February.
- More than half of the 200-DV-1 OU negative CM SV was experienced on the RCRA RFI/RI and CMS/FS documents. This documentation is unable to be started until the fieldwork is completed (currently scheduled for March 2017). The borehole drilling has been slowed due to unexpected radiological levels encountered at depths greater than planned, resulting in additional controls and revised approach to complete the drilling. Remobilization of the Becker Hammer driller has been impacted in order to support other drilling priorities.

#### CM Cost Performance (-\$0.1M/-1.0%)

The variance is within reporting thresholds.

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

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	1,205.1	1,191.2	1,170.3	(13.9)	-1.2%	20.9	1.8%	1,555.2	1,516.0	39.2

Numbers are rounded to the nearest \$0.1 million.

### CTD Schedule Performance (-\$13.9M/-1.2%)

The variance is within reporting thresholds.

### CTD Cost Performance (+\$20.9M/+1.8%)

The variance is within reporting thresholds.

### Variance at Completion (+\$39.2/+2.5%)

The variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

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

RL-0030 Soil and Groundwater Remediation	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	124.3	117.9	6.5
Incremental Scope Pending Change Management	0.0	0.9	(0.9)
RL-0030 –Total	124.3	118.8	5.6

Numbers are rounded to the nearest \$0.1 million

### Funds/Variance Analysis

RL-0030 FY2016 expected funding did not change in February and remains at \$124.3 million. The FYSF of \$118.7 million includes actions anticipated to meet funding targets.

### Critical Path Schedule

Critical path analysis can be provided upon request.

**Baseline Change Requests**BCR-030-16-019R0, *Definitization of CO #291, 200-IS-1 WIDs Information*BCR-030-16-020R0, *Definitization of CO #295 200-IS-1 Geographic Interface Segmentation*BCR-PRC-16-029R0, *Undistributed Budget Adjustments February 2016***MILESTONE STATUS**

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant achievements in project execution. Enforceable Tri-Party Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key activities. The PMB Annual Update, implemented in September 2013, and subsequent approved BCRs define CHPRC planning with respect to Tri-Party Agreement milestones. A Tentative Agreement for Tri-Party Agreement Milestone series M-015, M-016, M-037, M-085 and M-094 was signed on October 26, 2015. This agreement was in public review through February 12, 2016 (extended from December 11, 2015). Modifications stemming from public comments are being discussed between the agencies. The following table is a one year look ahead of RL-0030 Tri-Party Agreement enforceable milestones, non-enforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
<b>Complete Milestones</b>					
M-024-67	DOE Shall Complete Construction of all Wells Listed	12/31/16	9/14/15		Complete; 16-AMRP-0095 transmitted February 3, 2016.
<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 March 31, 2016 (TPA change control form M-15-13-02). Anticipate an additional extension through April 2016 due to ongoing change package C-13-01 reviews.
<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-015-38B	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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-015-91B	Submit FS Report and PP for 200-WA-1 to EPA	12/31/15		7/31/21	Proposed due date is 7/31/2021
M-015-92B	Submit RFI/CMS, RI/FS and PP/CAD for 200-EA-1 to Ecology	12/31/16			Proposed due date is 11/30/22
M-015-93B	Submit RFI/CMS, RI/FS and PP/CAD for 200-SW-2 to Ecology	12/31/16			Proposed due date is 1/31/23
<b>Milestones on Schedule or at risk</b>					
M-024-58I	Initiate Discussions of Well Commitments	6/1/16		6/1/16	On schedule
M-024-67-T01	Conclude Discussions of Well Commitments	8/1/16		8/1/16	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-016-110-T03	Contain the Strontium-90 GW plume at the 100-NR-2 OU	12/31/16		4/6/20	At risk, unable to accomplish work due to TCP
M-016-110-T04	Implement Remedial Actions in all 100A RODs for GW OUs	12/31/16		7/27/16	On schedule.

***The M-091-40L milestone series was removed per the change control form M-01-15-01, signed by DOE and Ecology on January 11, 2016. CHPRC is requesting DOE direction relative to these milestones via draft letter CHPRC-1601365 that is pending.***

## 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)

February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

The project walked down 15 new waste sites, down-posted 276-C (Hot-Semi works) and continued progress toward Beryllium Characterization and Decontamination at 242-B/BL. The project also implemented the DSA for PUREX, Revision 8 and resolved RL comments on the 216-Z-9 Safety Basis.

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

## KEY ACCOMPLISHMENTS

- Operations/Maintenance:
  - o Walked down 15 newly acquired waste sites.
  - o Continued B-Plant Surveillance.
  - o Continued progress toward Beryllium Characterization and Decontamination at 242-B/BL.
  - o Graded South East end of 218-W-3 along with a portion of the road in BC Controlled Area.
  - o Completed semi-annual inspection of Fall Protection Equipment.
  - o Completed PUREX DSA Training.
  - o Down-posted 276-C (Hot-Semi Works).
  - o Completed Annual 202-A Instrument Calibrations.
- Completed:
  - o 70 radiological facility surveillances.
  - o 36 PM activities.
- Nuclear Safety:
  - o Implemented PUREX, Revision 8 DSA.
  - o Submitted PUREX, Revision 9 DSA for internal review.
  - o Received comments on REDOX, Revision 5 Safety Evaluation Report (SER).
  - o Resolved RL comments on 216-Z-9 Safety Basis, out for CHPRC approval.

- 207A South Retention Basin Closure:
  - o Awaiting Final Permit Modification and RL direction to backfill.
- Continued Progress on Canyon Stabilization Documents:
  - o Submitted 276-BA closure plan to Ecology for review and incorporated comments.
  - o Incorporated internal CHPRC comments on the draft B-Plant Engineering Evaluation Cost Analysis (EE/CA).
  - o Submitted draft REDOX EE/CA for internal CHPRC review and incorporated comments.
  - o Submitted draft PUREX EE/CA for internal CHPRC review.
  - o Received approval of DSA changes for REDOX to allow for building demolition outside of facility, and limited hazard reduction inside (asbestos, immediate hazards).
  - o Drafted hazard reduction documents for PUREX and B-Plant exterior demolition target structures (203A tank farm, 276-BA).
- REDOX Roof Replacement:
  - o Completed external engineering review of the REDOX roof design.
- Demolish REDOX Ancillary Facilities:
  - o Continued the planning for the demolition of high risk facilities at REDOX including 2710S, 2711S, and 2718S.

## MAJOR ISSUES

None currently identified.

## RISK MANAGEMENT STATUS

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

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
<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>February</b> .				
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of <b>February</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>February</b> .				
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)				
No high risk threat values identified in the month of <b>February</b> .				
<b>Lifecycle Risk Triggers</b> (Risk could be realized at any point of the project)				
No lifecycle risk triggers identified in the month of <b>February</b> .				

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	●	↓	<p><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).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>On-Going</td> <td>N/A</td> </tr> </tbody> </table> <p><b>Mitigation Assessment:</b> During monthly routine surveillance activities it was identified that this risk was triggered based on several events with the PUREX Stack Sample System (i.e., bearing sheaves, belt replacement, and damper repairs). It is anticipated the projects will perform investigations in early March to determine if any additional repairs are needed.</p> <p><i>At this time no alternate course of actions identified at this time.</i></p>	Mitigation action(s)	FC Date	%	None identified at this time.	On-Going	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	On-Going	N/A								
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of February.										

## PROJECT BASELINE PERFORMANCE

### Current Month

#### (\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	1.4	1.2	1.1	(0.2)	-17.3%	0.1	7.3%

Numbers are rounded to the nearest \$0.1 million

**CM Schedule Performance: (-\$0.2M/-17.3%)**

The cost variance is within reporting thresholds.

**CM Cost Performance: (+\$0.1M/+7.3%)**

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	409.8	408.5	376.7	(1.2)	-0.3%	31.9	7.8%	469.1	434.9	34.2

Numbers are rounded to the nearest \$0.1 million

**CTD Schedule Performance: (-\$1.2M/-0.3%)**

The schedule variance is within reporting thresholds.

**CTD Cost Performance: (+31.9M/+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 (\$3.8 million), Emergency Response activities (\$0.6 million) and an underrun in overhead allocations (\$2.1 million).

**Variance at Completion (+\$34.2M/+7.3%)**

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

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

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

WBS 040/RL-0040 Nuclear Facility D&D	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	24.1	21.9	2.3
RL-0040 – Total	24.1	21.9	2.3

Numbers are rounded to the nearest \$0.1 million.

**Funds/Variance Analysis**

The FYSF decreased by ~\$1.4 million offset by an increase in fee, for a total decrease of ~\$1.0 million. Note: the reductions were based upon FY2016 strategy session to achieve efficiencies (~\$0.7 million) and scope deferrals (~\$0.7 million).

**Critical Path Schedule**

Critical path analysis can be provided upon request.

**Baseline Change Requests**

- BCR-040-16-005R0, *Deferral of Canyon Risk Mitigation Planning Package*
- BCR-040-16-006R0, *Definitization of CO #190, Lysimeter Test Facility*
- BCR-PRC-16-029R0, *Undistributed Budget Adjustments February 2016*



## 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 schedule 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)

February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

The project completed troubleshooting on the Modec trailer and it is now operational. The 100K AB Waste Sites Remediation Project continued working the 13 new waste sites and reviewing samples received from the lab. In addition, Mod 483 to issue CO #304, *Initiate Transition of the River Corridor Contract (RCCC) Scope Activities into the Plateau Remediation Contract (PRC)* 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

- 165 KE Asbestos Abatement:
  - o Completed Modec trailer troubleshooting – now operational.
- Area AB waste site remediation:
  - o Continued working the 13 new waste sites.
  - o Received samples back from the lab and currently in review.
- Completed 16 Radiological Surveillances.
- Received Mod 483 authorizing PRC to initiate transition of the RCCC scope from WCH, which includes initiating the following:
  - o Planning and procurement of equipment/tooling for remediation of waste site 300-296.
  - o Transition 324 building and ancillary facilities.
  - o Transition ERDF.
  - o Transition 618-10 and 618-11 and remaining RCCC work.

## 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 continue with RL regarding continued progress and additional funds needed. The project is currently preparing a BCR for submittal/implementation in March that will increase the AB Waste Site BCWS to allow for disposal of additional contaminated tons to ERDF up to the 100K parameter plus 10 percent or 447,803 tons.

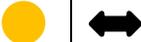
## RISK MANAGEMENT STATUS

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 stoplight chart:</b>				
No major changes to the monthly stoplight chart in the month of <b>February</b> .				
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of <b>February</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>February</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)				

<p>KBC-002: Subcontract Change Orders/Claims</p>	<p>Subcontracts for D4, soil remediation, and other field support services require revision based on discovery of changed conditions or completion requirements resulting in cost impacts and schedule delays.</p> <p><b>Risk Handling Strategy:</b> Accept</p> <p><b>Probability:</b> Low (10% to 25%) <b>Worst Case Impacts:</b> \$1.5 million, 66 days</p>		<p><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. Additional field changes include the need to excavate a greater amount of soil than planned to complete remediation.</p> <table border="1" data-bbox="883 338 1578 386"> <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> In the month of February, the project continued to develop a detailed estimate for AB Waste Site remediation based upon the estimated actual tons of soil to be remediated to complete the scope. It is assumed a BCR will be prepared to modify the baseline to reflect AB remediation up to an estimated 407,094 +10% tons within the 100K Area.</p> <p>A contract modification will be prepared to add any tonnage needed to complete the AB area that exceeds 407,094 +10% value in tons. Discussions continue with RL regarding the need for additional funds later in the fiscal year that will be required to complete the AB Area.</p> <p>Increased communication/interface continues between the Project and ERDF to obtain delivery of containers needed to achieve planned production rates for waste site remediation needed containers.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%							
None identified at this time.	N/A	N/A							
<p><b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)</p>									
<p>No unassigned risks identified in the month of February.</p>									

## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	1.5	0.3	2.1	(1.2)	-81.3%	(1.8)	-676.7%

Numbers are rounded to the nearest \$0.1 million

#### CM Schedule Performance (-\$1.2M/-81.3%)

The negative schedule variance for the current month is primarily due to performing the excavation activities in prior months ahead of schedule. In addition, the Confirmatory Documentation work activities for the 100K Waste Site Area AB are slightly behind schedule until a path forward on AB Waste Site Remediation is resolved.

#### CM Cost Performance (-\$1.8M/-676.7%)

The negative cost variance for the current month is primarily due to greater than planned soil excavation being performed for the 100K Area AB Waste Sites. This has resulted in higher than anticipated ERDF disposal and contract costs. Finally, per RL decision, work has begun on CO #304 RCCC Transition, while the BCR will be implemented the following month.

## 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	322.5	322.2	296.2	(0.2)	-0.1%	26.0	8.1%	404.2	375.3	28.9

Numbers are rounded to the nearest \$0.1 million

### CTD Schedule Performance (-\$0.2M/-0.1%)

The schedule variance is within reporting thresholds.

### CTD Cost Performance (+\$26.0M/+8.1%)

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

### Variance at Completion (+\$28.9M/+7.2%)

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

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

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

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	FY2016		Spend Variance
	Projected Funding	Spending Forecast	
Spending Forecast	19.1	15.5	3.6
Incremental Scope Pending Change Management	0	8.3	(8.3)
RL-0041 - Total	19.1	23.8	(4.7)

Numbers are rounded to the nearest \$0.1 million.

### Funds/Variance Analysis:

The RL-0041 project funding increased from \$15.1 million to \$19.1 million for FY2016 to support the RCCC transition. The FYSF increased from \$22.9 million to \$23.8 million. The increase is due to an update for ERDF disposal rate/ton in the forecast file.

### Critical Path Schedule

Critical Path Analysis can be provided upon request.

**Baseline Change Requests**

BCR-041C-16-011R0, *PBS RL-0041 Undistributed Budget Adjustments February 2016*

**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)

**February 2016**  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

## PROJECT SUMMARY

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

## EMS OBJECTIVES AND TARGET STATUS

None currently identified.

## TARGET ZERO PERFORMANCE

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

## KEY ACCOMPLISHMENTS

- Completed all weekly and monthly maintenance/inspections.
- Completed shipment of Tritium drum from 4802.
- Completed:
  - o 21 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>February</b> .				
<b>Realized Risks</b> (Risks that are currently impacting project cost/schedule)				
No realized risks for the month of <b>February</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>February</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>February</b> .				
<b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in the month of <b>February</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	0.2	0.2	0.1	(0.0)	-2.4%	0.0	13.1%

Numbers are rounded to the nearest \$0.1M

**CM Schedule Performance: (-\$0.0M/-2.4%)**

The schedule variance is within reporting thresholds.

**CM Cost Performance: (+\$0.0M/+13.1%)**

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	20.9	20.9	17.1	0.0	0.2%	3.9	18.4%	26.5	22.8	3.7

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 (+\$3.9M/+18.4%)

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

### Variance at Completion (+\$3.7M/+13.8%)

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		
	Projected Funding	Spending Forecast	Spend Variance
Spending Forecast	3.2	1.8	1.4
RL-0042 – Total	3.2	1.8	1.4

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



February 2016  
CHPRC-2016-02, 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) 2016 / 01 / 25							
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788				b. PHASE				b. TO (YYYYMMDD) 2016 / 02 / 21							
			c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO X YES (YYYYMMDD) 2009 / 09 / 18											
<b>5. CONTRACT DATA</b>																		
a. QUANTITY 1	b. NEGOTIATED COST 5,549,408	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 26,054	d. TARGET PROFIT/FEE 233,752	e. TARGET PRICE 5,783,160	f. ESTIMATED PRICE 5,669,098	g. CONTRACT CEILING 5,783,160	h. ESTIMATED CONTRACT CEILING 5,669,098	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 5,341,859									c. SIGNATURE				d. DATE SIGNED (YYYYMMDD) 2016 / 02 / 21					
b. WORST CASE 5,451,106																		
c. MOST LIKELY 5,435,345			5,575,462			140,117												
<b>8. PERFORMANCE DATA</b>																		
CAPN.PBS																		
ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION				
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)								
RL-0011 Nuclear Mat Stab & Disp PFP	8,399	5,830	7,948	(2,568)	(2,117)	910,422	870,558	879,551	(39,863)	(8,993)	0	0	0	971,797	1,013,165	(41,368)		
RL-0012 SNF Stabilization & Disp	13,941	15,054	5,258	1,113	9,796	554,468	555,300	556,907	832	(1,607)	0	0	0	722,278	719,549	2,729		
RL-0013 Solid Waste Stab & Disp	8,764	8,622	7,605	(142)	1,018	1,025,314	1,024,556	961,955	(758)	62,601	0	0	0	1,324,456	1,251,749	72,707		
RL-0030 Soil & Water Rem-Grndwtr/Vadose	11,201	8,848	8,936	(2,353)	(88)	1,205,084	1,191,206	1,170,309	(13,879)	20,897	0	0	0	1,553,951	1,514,709	39,242		
RL-0040 Nuc Fac D&D - Remainder Hanfrd	1,425	1,178	1,093	(246)	86	409,753	408,515	376,660	(1,237)	31,856	0	0	0	468,985	434,803	34,182		
RL-0041 Nuc Fac D&D - RC Closure Proj	1,464	273	2,123	(1,191)	(1,850)	322,473	322,230	296,231	(244)	25,998	0	0	0	398,788	369,874	28,914		
RL-0042 Nuc Fac D&D - FFTF Proj	154	150	131	(4)	20	20,880	20,912	17,058	32	3,854	0	0	0	26,468	22,815	3,653		
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													15,195	15,195	0			
e. SUBTOTAL	45,347	39,957	33,093	(5,391)	6,864	4,448,395	4,393,278	4,258,672	(55,117)	134,606	0	0	0	5,481,919	5,341,859	140,059		
f. MANAGEMENT RESERVE													93,486					
g. TOTAL	45,347	39,957	33,093	(5,391)	6,864	4,448,395	4,393,278	4,258,672	(55,117)	134,606	0	0	0	5,575,405				
<b>9. RECONCILIATION TO CONTRACT BUDGET BASELINE</b>																		
a. VARIANCE ADJUSTMENT																		
b. TOTAL CONTRACT VARIANCE																		
										(55,117)	134,606			5,575,405	5,341,859	233,546		

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)		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			2016 / 01 / 25		
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE			b. TO (YYYYMMDD)
						NO X YES (YYYYMMDD) 2009 / 09 / 18			2016 / 02 / 21

WBS.Resp Org Group WBS.Resp Org Code  ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)							
34 - Env Program & Strategic Plng	685	749	649	64	101	60,035	59,658	55,445	550	4,212	0	0	0	82,402	80,294	2,108	
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	222	222	159	0	63	3,259	3,259	1,686	0	1,572	0	0	0	8,426	6,284	2,142	
3B - PFP Closure Project	8,349	5,781	7,931	2,578	6,941	823,577	783,714	800,277	(39,863)	(16,563)	0	0	0	884,538	933,777	(49,239)	
3C - Waste & Fuels Management Project	8,733	8,591	7,570	2,480	4,077	917,242	916,484	854,078	(758)	62,406	0	0	0	1,215,609	1,143,109	72,499	
3D - Soil & Groundwater Remediation	10,461	8,044	8,238	(559)	1,581	1,045,900	1,032,399	1,009,406	(13,501)	22,993	0	0	0	1,370,761	1,327,398	43,363	
3G - K Basin Oper & Plateau Remediation Project	16,897	16,569	8,546	563	(1,739)	1,125,857	1,125,240	1,089,290	(617)	35,950	0	0	0	1,432,464	1,387,314	45,150	
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														15,195	15,195	0	
e. SUBTOTAL (Performance Measurement Baseline)	45,347	39,957	33,093	(5,391)	6,864	4,448,395	4,393,278	4,258,672	(55,117)	134,606	0	0	0	5,481,919	5,341,859	140,059	
f. MANAGEMENT RESERVE														93,486			
g. TOTAL	45,347	39,957	33,093	(5,391)	6,864	4,448,395	4,393,278	4,258,672	(55,117)	134,606	0	0	0	5,575,405			



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			2016 / 01 / 25			
b. LOCATION (Address and ZIP Code)			b. NUMBER		b. PHASE			b. TO (YYYYMMDD)					
Richland, WA			RL14788					2016 / 02 / 21					
			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 MAR 2016 (4)	+2 APR 2016 (5)	+3 MAY 2016 (6)	+4 JUN 2016 (7)	+5 JUL 2016 (8)	+6 AUG 2016 (9)					
300 - Office of the President	11	545	7	6	8	8	6	6	6	6	63	63	718
303 - Internal Audit	5	385	5	5	5	5	5	5	5	5	60	60	540
304 - General Counsel	4	363	4	4	4	5	5	5	5	5	60	60	516
31 - Communications	9	857	9	9	9	9	9	9	9	9	108	108	1,136
32 - Safety Health Security & Quality	56	6,146	60	59	59	59	58	58	58	58	774	775	8,104
34 - Env Program & Strategic PIng	41	4,041	42	42	42	42	41	41	41	41	604	600	5,536
35 - Business Services	56	6,536	62	63	64	64	64	64	64	64	759	761	8,499
36 - Prime Contract & Proj Integr	54	3,915	56	56	59	59	59	59	59	59	652	643	5,619
38 - Project Technical Services	30	4,988	35	35	35	34	33	33	33	33	433	427	6,086
3B - PFP Closure Project	350	42,954	350	327	347	346	350	350	350	350	1,768	-	47,143
3C - Waste & Fuels Management Project	361	43,295	327	308	294	290	287	287	287	287	3,708	3,619	52,703
3D - Soil & Groundwater Remediation	306	30,554	299	292	305	301	284	284	284	284	3,654	3,815	40,071
3G - KBO&PR Project	311	41,084	286	300	332	323	308	308	308	308	3,919	3,527	50,694
Grand Totals	1,594	185,663	1,544	1,507	1,562	1,543	1,508	1,508	1,508	1,508	16,562	14,458	227,364



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

<b>Contractually Required Cost, Schedule, EAC variance, Management Reserve Use</b>		
Variance in Performance BAC and EAC: The variance at complete (VAC) between the BAC and EAC this month is a +\$140.1 million, +2.6% and is within reporting thresholds.		
<b>Format 1 and 3 Contract Data:</b>	<b>Contract Price Adjustments</b>	
CPs - In Process		
	Total Authorized Unpriced Work	\$26,054
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	<b>Grand Total Adjustments</b>	<b>\$26,054</b>

<b>Use of Management Reserve (MR), Fee Activity and Undistributed Budget (UB):</b>			
<b>MR Utilization</b>			
<b>BCR Number</b>	<b>Title</b>	<b>Fiscal Year</b>	<b>MR</b>
N/A	N/A	2015 - 2018	N/A
Overall, there was no change to Management Reserve during February.			
<b>Fee Activity</b>			
<b>BCR Number</b>	<b>Title</b>	<b>Fiscal Year</b>	<b>Fee</b>
BCR-012C-16-007R0	<i>Definitization of REA-12-1519 STP Sequestration Impacts</i>	2015 - 2018	\$500K
BCR-013-16-016R0	<i>Definitization of REA 013 1538, 231-Z-D-R-11 Concrete Box Mitigation</i>	2015 - 2018	\$37K
BCR-030-16-019R0	<i>Definitization of CO #291, 200-IS-1 WIDs Information</i>	2015 - 2018	\$114K
BCR-030-16-020R0	<i>Definitization of CO #295 200-IS-1 Geographic Interface Segmentation</i>	2015 - 2018	\$16K
BCR-040-16-006R0	<i>Definitization of CO #190, Lysimeter Test Facility</i>	2015 - 2018	\$7K
Overall, there was an increase of \$674K to Fee during February.			
<b>UB Activity</b>			
<b>BCR Number</b>	<b>Title</b>	<b>Fiscal Year</b>	<b>UB</b>
BCR-041C-16-011R0	<i>PBSS RL-0041 Undistributed Budget Adjustments February 2016</i>	2015 - 2018	\$ 4,000K
BCR-PRC-16-029R0	<i>Undistributed Budget Adjustments February 2016</i>	2015 - 2018	\$ 7,072K
The Undistributed Budget increased by \$11,072K for an overall increase to the Performance Measurement Baseline of \$21,391K during February.			

**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> 3/15/2016	<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

February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

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

**D. A. Millikin**  
Director of  
Communications

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

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

## PROGRAM SUMMARY

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

### EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
16-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 82 percent by compressing occupancy and vacating underutilized facilities. Vacated/unoccupied facilities declared unusable and designated inactive placed in Care Taker System.	9/30/16	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	55%
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	42%
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	30%

\*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	1	2	<ul style="list-style-type: none"> <li>2/4/16 – Employee was struck in face by t-post while pounding them into the ground (23931)</li> </ul>
First Aid Cases	0	9	N/A
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 February, which occurred at the PTS Project.
  - o Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
    - Continued support of site-wide standards committees and site-wide steering committees. DOE-0346, *Hanford Site Fall Protection Program*, is pending implementation of Revision 1A. DOE-0344, *Hanford Site Excavation, Trenching and Shoring Procedure*, is being routed for approval signatures; implementation pending. DOE-0352, *Hanford Site Respiratory Protection Program* is going through the revision process at this time.
    - Continued implementation of the Chronic Beryllium Disease Prevention Program (CBDPP) Revision 2A. Beryllium assessments have been completed on 1145 CHPRC facilities. Beryllium characterizations have been completed on 752 CHPRC facilities.
    - Continued to provide support to the PFP for respiratory protection issues and resolution of the compressed breathing air issues.
    - Continued support to projects on Oversight of Confined Space work activities.
    - Support to projects on Fall Protection Program requirements and Fall Protection Work Permit reviews.
    - Support to projects on scaffolding program requirements.
    - Provided support for Globally Harmonized System and Chemical Management Implementation across projects.
    - Provided additional confined space training/briefings for KBO&PR, and PTS, and provided support to projects to approve additional competent/qualified personnel for DOE-0360 Revision 1, *Confined Space*.
    - Provided support to PFP for ergonomic evaluation of workstations for respiratory stations.
    - Provided support to PFP, W&FMP, PTS, and KBO&PR for asbestos characterization activities.
    - Provided support to W&FMP and PTS at WESF for lead removal of surfacing material.
    - 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 ventilation activities.
- Provided support in the development of FPWP for crane evaluation and roof work at T-Plant.
- Provided support in the development of FPWP for WRAP stack access.
- Completed the Voluntary Protection Program (VPP) Self-Assessment and submitted to RL.
- o Radiological Control accomplishments:
  - Provided specific training for clearance survey plan preparation to RadCon Managers, Health Physicists, and most RadCon First Line Managers.
  - Provided presentation to RCTs explaining what constitutes a clearance survey of personal property at 95 percent confidence level.
  - Continued Survey Simple upgrade efforts.
  - Approved Technical Evaluation, *PUREX Facility Surveillance and Maintenance*, for PUREX.
  - Continued support of oversight at PFP for specific high hazard activities.
  - Supported causal evaluations and critiques at PFP.
  - Continued support of RCCC transition planning.
- o Nuclear Operations Support & Compliance accomplishments:
  - Safety Basis documents and letters transmitted to RL include:
    - Letter, CHPRC-1600786, dated February 18, 2016, *Transmittal of the 2016 Annual Update of the Master Documented Safety Analysis, and Unreviewed Safety Question Determination Summary*.
    - Letter, CHPRC-1504411.2, dated February 29, 2016, *The Preliminary Documented Safety Analysis for the Sludge Treatment Project Engineered Container Retrieval and Transfer System for RL Approval*.
  - Document approval received from RL:
    - Letter, 16-NSD-0016\_RL REISSUE, dated February 3, 2016, *Transmittal of the 2015 Annual Update to the B Plant DSA, HNF-14804, Revision 6, and the Unreviewed Safety Question Determination Summary*.
    - Letter, 16-NSD-0020\_RL, dated February 8, 2016, *Transmittal of the 2015 Annual Update to HNF-13830, Revision 5, “Documented Safety Analysis for the Reduction-Oxidation Facility,” and the Unreviewed Safety Question (USQ) Determination Summary*.
    - Letter, 16-SEI-0036, dated February 23, 2016, Request for Approval for the PFP Emergency Planning Hazards Assessment, HNF-SD-PRP-HA-002, Revision 13.
  - Criticality Safety
    - CSER 15-004, Revision 0, *Removal of Residual Pipe and Drain Line at the PFP*.
    - CSER 15-002, Revision 1, *Criticality Safety Incredibility Evaluation Report for the Final Demolition of Buildings 234-5Z, 236-Z, and 242-Z*.
  - Transportation Safety
    - Completed SHS&Q-2016-WSA-16913, *Effectiveness Review of Procedure PRC-PRO-TP-40474*.
    - Completed SHS&Q-2016-WSA-16441, *Package Specific Safety Document/One-Time Request for Shipment Implementation*.
    - Completed Loan Agreement for Grey Cruiser with PNNL.
    - CE-SPA-PNNL-2015-001, *PNNL Debris*, was revised and sent to RL for review and approval (approved March 1, 2016).

- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
  - 214 Condition Reports (CRs) were screened:
    - One Significant issues identified.
    - Two Adverse issues identified.
    - 116 Track until Fixed (TUF) issues identified.
    - 56 Trend Only (TO) items identified.
    - 36 Opportunity for Improvement (OFI) items identified.
    - Three Screen Out.
  - 209 CRs administratively closed.
  - 280 CR actions administratively closed.
  - Completed Root Cause Evaluation and submitted final Occurrence Reporting and Processing System (ORPS) reports for EM-RL--CPRC-PFP-2015-0017, *Low Levels of Contamination Discovered on Vortex Coolers and Interior of an Exhaust Hose*, and EM-RL—CPRC-PFP-2016-0001, *Low Level Radiological Contamination on Regulator*.
  - Submitted final ORPS report for EM-RL—CPRC-PFP-2015-0018, *Identification of Contamination – Door 610*.
  - Coordinated recurring monthly DNFSB Sludge Treatment Plant (STP) status conference call.
  - Provided support and coordination for a conference call with the DNFSB to discuss the PFP demolition planning and readiness assessment documents in order to better understand the CHPRC strategy for protection of workers and the public during PFP demolition activities. The call was completed on February 25, 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 on March 2, 2016. A dry-run was completed on February 24, 2016.
  - Ten documents were provided in response to DNFSB requests for information.
  - One external Lessons Learned was submitted to OPEXShare in February 2016; LL-2016-RL-PFP-0001, *Work in a Congested Area Created Conditions for an Injury Requiring Surgery*.
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
  - Developed FY2015 Safety Culture Survey briefing report for Senior Management.
  - Issued final report for 10 CFR 835 Subparts I & N, Reports to Individuals and Emergency Exposure Situations. There were three issues identified related to CHPRC Radiation Protection or project specific implementing procedures.
  - Provided specific mentoring and feedback to assessors and responsible managers that conducted management assessments. Feedback was provided to help improve the quality, including clarity and readability of future reports.
  - Facilitated the first in a series of Assessment Planning Workshops on February 23, 2016. The workshop was well attended and received positive feedback from attendees.
  - Completed review of PRC-PRO-QA-40091, *Integrated Assessment Planning* (official revision pending).
  - Completed review of PRC-MP-QA-40092, *CHPRC Assessment Program Plan* (official revision pending).
  - Continued work on the revision to the Integrated Safety Management System Description.
  - Continued to support the S&GRP organization in evaluation of the calibration methods used for Geophysical Logging equipment.
  - Supported the EM-43/DOE RL audit of the K-Annex/ECRTS project.
  - The Quality Systems organization completed ten surveillances covering the areas of material and test control, Quality Assurance program implementation and verification of corrective actions.

- o Fire Protection accomplishments:
  - Fire Protection Engineering Team assignments were adjusted in February to respond to changes in Project activities.
  - The Matrix of Inspection, Testing and Maintenance requirements for fire protection systems is completed and will be provided to the Hanford Fire Protection Forum. The Forum will be reviewing the information for use as a Site Standard.
  - Support is being provided to support the NLOP Equipment removal in the T Plant Canyon.
  - Two of the new fire protection engineers have begun working on the Micro-biologically Influenced Corrosion issue to develop a method for testing and sampling.
  - CHPRC is drafting an Administrative Interface Agreement/Interface Contract Document to improve coordination on the IT&M issues.
  - TSR Surveillances:
    - SWOC:
      - o 2X-15-08234, CWC 3 Month Combustible Surveillance (TSR).
    - 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 FS Supply Valves 1 (TSR).
    - Facility Fire Protection Assessments:
      - o The Triennial Fire Protection Self-Assessment is in final review.
      - o B Plant Complex Facility Fire Protection Assessment.
      - o Building 402 Facility Fire Protection Assessment
    - Fire Hazard Analysis (FHA):
      - o The 105KW Complex FHA is in development.
      - o The T Plant FHA final comments are in review.
      - o The REDOX FHA is being peer reviewed.
      - o A new FHA for 241-Z-361 and 216-Z-9 is in development.
      - o The PUREX FHA is in development.
      - o 241-Z-361 and 216-Z-9 FHA will be out for review in March.
      - o The SWOC FHA has to be modified to show the removal of T Plant. The publication of the modification will occur at the time the T Plant FHA is published.
- 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 1145 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 additional OS&IH personnel and additional RadCon personnel, all from the SHS&Q Central group.

- o **Action:** Supporting PFP initiatives, supplied breathing air system issues; radiological & safety oversight, clearance survey plan upgrades, DSA Revision 13 implementation, and J plan waste path forward.
- o **Issue:** Fire Protection program weaknesses.
- o **Status:** Program weaknesses continue to be identified and corrective actions are underway to improve program. Additional personnel resources have been hired to support projects.
- o **Action:** Continued interface with MSA to work off CHPRC back log items on the MSA IT&M log and to improve MSA HFD support to CHPRC projects. Recent RL concerns regarding slow improvements and continuing issues with MSA ITM have been raised by RL and are being addressed. Working with CHPRC projects to schedule and perform back log of facility fire protection assessments.

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

### **Environmental Protection**

- **Compliance Status**

- o Completed working with the Washington Department of Health (WDOH) in reviewing final changes to the draft approval licenses for the ventilation upgrades project at the WESF. Final license approvals were received at the beginning of March.
- o Ecology began review of the CWC, T Plant and Low Level Burial Grounds RCRA Part B application, and is preparing to go out for public comment on the closure plan submittals for 207-A South Retention Basin and WESF. This is in preparation for incorporating these units into Hanford Facility RCRA Permit Revision 8C.
- o Efforts continue to support RL and Ecology in preparation of the Revision 9 permit renewal for the Hanford Facility RCRA Permit. The major theme workshops with Ecology, RL and Site contractors for the Hanford Site RCRA Part A Permit applications continued. RL and Site contractors began discussions on Ecology's Major Theme Table for Site security.
- o Support to PFP continues in the area of compliance with National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos standards. This includes development of numerous NESHAP asbestos thorough inspection reports.
- o In response to the WDOH and Ecology to RL General Notice of Priority Violation letter for stack flow/monitoring issues at CSB, removal of continuous air monitors at B Plant and PUREX, and loss of continuous air sampling at PUREX, CHPRC drafted compliance plans as called for by the letter. These draft plans were provided to RL for review and consideration.
- o Letters were received from Ecology closing out five RCRA inspections.
- o Responses to three Ecology inspection reports received in January and February (CWC, Solid Waste Operations Complex, and PUREX) were drafted. Responses are due to Ecology around April 1. These inspection reports contained a number of alleged "non-compliances," as well as numerous concerns.
- o On January 28, received an advance copy of an EPA to RL letter responding to RL's October letter challenging EPA's CERCLA offsite waste determinations for Solid Waste Operations Complex facilities. Essentially, EPA did not move off its original position. RL responded to EPA on February 9, disagreeing with EPA but not appealing its determination.

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

- **Assessment Program:**

- o An internal management assessment was completed to evaluate the effectiveness of the IBM Rational DOORS\_PRC 9.6 electronic database being developed to provide value added management of contract-directed environmental requirements. The scope of this MA was to evaluate the progress made to-date in applying the database to manage requirements, assess progress against management expectations, and identify potential issues which could affect further development of the database. One opportunity for improvement was identified.

## Business Services

- **Acquisition Planning:**
  - Rolled out the EMS goal electronic signature process enhancement to a test group within the Procurement organization.
  - Developed a one-time custom report for Project Technical Services that depicted the total active construction contracts by contractor. The purpose of the report was to graphically show the distribution of work between CHPRC construction contractors as aid to verify workloads are manageable.
  - Developed an Expression of Interest, Sample Statement of Work, and ROM Estimate Sheet for the purposes of obtaining capability statements from firms interested in supporting CHPRC's issue resolution process.
  - Collaborated with the S&GRP to discuss the award process for field construction work that will support a truncated field work schedule.
  - Developed the business case draft for key fleet and motor carrier services that would be transitioned as part of the RCCC scope transition.
  - Reviewed with WCH representatives the subcontracts that would be assigned to CHPRC as part of the RCCC transition.
  - Strategized with 300-296 waste site representatives to develop a procurement strategy for completing design elements of the project.
  - Developed a contracting strategy for modifying an analytical contract to handle larger sample volumes.
  - Developed a strategy to handle the modification of existing agreements for the cesium strontium cask storage project.
- **Facilities & Property Management (F&PM):**
  - FY2015 KPMG property system audit found the system substantially compliant, with six administrative continuous improvement findings. CAP formally requested from RL. CAP review with RL Property and Finance groups was held in late January. Formal CAP submitted to RL in February 2016.
  - 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.
  - Work in process to transfer MO2102 from Washington River Protection Solutions (WRPS) to CHPRC at PFP. Waiting WRPS signature on Standard Form-122 to complete transfer in SAMS. Near completion, RL has signed and sent to WRPS for ORP signature to complete transfer.
  - Efforts continued on installing two self-contained showers at PFP, which are nearing completion. Two self-contained facilities at 100K were completed in February.
  - MO407 in the 200E area in process of transfer to MSA.
  - Utility disconnects planned for MO223, MO506, MO507, and MO917 to ready for D&D.
  - Initiated RCCC property/facilities Transition checklist for the 324 facility. 7 of the 22 Activity Forms completed and submitted.
  - Supported the CHPRC Internal Audit for Vehicle Utilization follow-up communications to vehicle custodians.
  - Met with MSA Fleet Management for continuous improvement to fleet utilization/accountability.
- **Finance:**
  - February month end completed with no suspensions.
  - Compiled metrics on compliance with PRC-PRO-FM-045, *Labor Charging*, procedure requirement for 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 at the beginning of paid overtime shifts.

- **Human Resources:**
  - o Compensation completed and submitted data to Western Management Group Government the contractors' salary survey to gauge market competitiveness of CHPRC salary structures. We anticipate receiving results from this survey data in the spring of 2016.
  - o Completed the annual Affirmative Action Plan and goals and prepared for senior staff presentation.
  - o Participated in transition kick-off meeting for RCCC. Meetings were held with WCH HR management and a transition process established for affected non-represented personnel.
- **Labor Relations:**
  - o CHPRC working with WCH and HAMTC to transition represented WCH employees affected by 324 work scope transition.
  - o Arbitrator ruled in favor of CHPRC on grievance PRC-014-076 in regards to shift differential pay.
  - 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 continue discussions, most recently as they apply to the Union's recently proposed settlement agreement.
  - o Grievance PRC-014-096 dealing with jurisdiction of steamlines is scheduled for arbitration on March 23, 2016.
  - o Grievance PRC-014-109 scheduled for arbitration on February 24, 2016 was withdrawn by the union. Additionally, the union withdrew grievance PRC-015-028 that was in the arbitration process. The parties also reached settlement on another grievance in the arbitration process – PRC-015-017.
  - o No new grievances were requested by the Union to proceed to arbitration during this reporting period.

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

- **Contract Compliance and Change Management (CC&CM):**
  - o In February, CC&CM received and processed 11 contract modifications (numbers 484-488, 490, 494-496, 498, and 500) from RL.
  - o The Correspondence Review Team received and determined the distribution for 76 incoming letters/documents. The Prime Contract Compliance Manager reviewed 29 outgoing correspondence packages.
  - o CHPRC RCCC Transition Planning:
    - Issued the draft Transfer of River Corridor Closure Contract Work Scope to the Plateau Remediation Contract Transition Plan to RL.
    - Received and dispositioned RL comments.
    - Finalized Transition Plan and submitted Revision 0 to RL.
  - o Incorporated comments in the 90 percent draft of the CHPRC RCCC Transition Extent of Condition Report.
  - o Initiated Transition of the 324 Facility from WCH.
  - o Eight CPs/REAs Definitized:
    - RL-0011
      - CO 297, PFP Document Update to Support 242-Z/236-Z Slab Removal (February 24, 2016).
    - RL-0030
      - CO 263, Environmental Restoration Disposal Facility (ERDF) Transfer Pipeline Construction (February 9, 2016).
      - CO 266, 200-BP-5 Operable Unit Construction and Operations and Maintenance of Transfer Pipelines (February 25, 2016).

- CO 293, 100-BC-5 RI-FS Decisional Re-Write (February 24, 2016).
  - CO 298, 200-IS-1 Waste Site Change Package & Work Plan Update (January 28, 2016).
- RL-0040
  - REA 040 1449, Surveillance & Maintenance of 200-ZP-1 Process Facility and Ancillary Buildings (February 19, 2016).
- o Three CPs/REAs Submitted (On or Ahead of Schedule):
  - RL-0012
    - CO 300, 100-KW Garnet Filter Media Remediation (February 24, 2016).
    - CO 301, 100-KW Sand Filter Media Remediation (February 24, 2016).
  - RL-0030
    - REA 030 1566, Low Flow Micro-Purge (February 16, 2016).
- o Zero CPs/REAs Submitted (Late):
  - None.
- o Two CPs/REAs in Development:
  - CO 304, Initiate Transition of RCCC scope activities into the PRC.
  - REA 013 1591, Submit Solid Waste Operations Complex Part B Permit Modification Request.
- o Miscellaneous Estimating Support:
  - Supported RL requests for information on CO 289, RCCC Transition Planning.
  - Reviewed two Request for Service estimates for Navy Reactor Compartment Disposal.
  - Provided estimating support for an impact analysis for Hanford Site Electrical Safety Program, DOE-0359 Revision 3.
- **Earned Value Management System (EVMS) Compliance and Reporting:**
  - o Progress continued to be made on EVM Assessment Corrective Actions. As of month end, 56 of 68 actions had been completed (82 percent complete).
  - o During January, EVMS C&R facilitated and supported the processing of 13 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 emphasis on developing the Performance Measurement Baseline (PMB) and change proposals for scope that will transfer to CHPRC.
  - o Completed the transition to computer based training for the Accrual training class. The VAR training, and BCR training classes are the next to be completed with a targeted completion date of March/April.
  - o Continued to lead CHPRC EVM training and Qualification initiative.
  - o A draft independent gap analysis of the CHPRC EVMS and the implementation of EVM by the PFP CAP 2 and K West Basin Sludge Removal CAP against Revision 0 of the DOE Earned Value Management System Interpretive Handbook (EVMSIH) was completed. Finalization of this effort was put on hold due to DOE PM-30 being in the process of making a major revision to the EVMSIH. This gap analysis will be revisited once the revised EVMSIH is published and released to contractors for use.
  - o CHPRC supported the DOE PM-30/EFCOG initiative to update the DOE EVMSIH by participating in a DOE PM-30/EFCOG working session in Washington, DC the week of February 15, 2016. Significant progress was made on identifying and agreeing on changes to the EVMSIH. A second meeting in Washington, DC is planned for March to perform a final DOE PM-30/EFCOG review.
  - o A final review of the completed corrective actions in response to DOE-RL Finding A-15-ESQ-PRC-001-F01, *Corrective Action Logs and Variance Analysis Reports contain inaccurate and*

*incomplete information*, (CR-2015-0900) was completed and determined that the overall corrective action was ready for closeout and verification by RL for final closure of the finding. The request for RL closure review of CR-2015-0900 was submitted to RL on February 9, 2016.

- **Information and Interface Management:**

- **Interface Management**

- o Interfaces (Technical, Administrative and Regulatory):
  - Continue to monitor the isolation of the 100 Area Raw Water Fire Loop system by WCH/MSA.
  - Completed transfer arrangement with WRPS on 100 PAPR units for PFP D&D operations and returned 200 new MSA Cartridge Filters previously transferred from WRPS to PFP for emerging project needs.
- o Annual Forecast of Services:
  - Evaluating MSA resource needs and impacts related to RCCC Transition. Biweekly meetings with MSA are occurring to ensure ready to serve operations are not impacted.
- o Inter-Contractor Issue Resolution:
  - Completed internal reviews and data call collection for the annual ISAP reporting request from MSA.
  - Provided input to the Ten Year Site Plan.
  - Attended the monthly Integrated Biological Control meeting.
  - Attended weekly field interface and resource allocation meetings.
  - Participated in regular Interface Management leadership meetings with MSA and WRPS.
  - Attended the Contractor Interface Board meeting hosted by WRPS.
  - Supporting discussions between WRPS at ETF and CHPRC at the Modutanks facility, regarding lines of demarcation and maintenance on the “tie-in” to the ETF raw water line.
  - Drafted CHPRC On-Site Property Loan Agreement for S&GRP personnel for loan of Cable Reel Trailer to Lockheed Martin for use during the month of March 2016.
  - Working with MSA on an efficiency opportunity identified during a field walk-down in which CHPRC could eliminate over 300 feet of access roads; a reduction in mitigation due to less destroyed vegetation near the 105-N Reactor.
  - 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. The SDD J.3 ID#20 will be revised to include interim corrective measures until a more inclusive document can be drafted.
  - Worked cost settlement between WESF project staff and MSA Fleet Maintenance regarding operational standby of the Regulated Guzzler due to restrictions related to weather.
- o Controlling and Service Agreements:
  - Issued TOC-AIA-PRC-0031, Operations Interface for Activities within or adjacent to Nuclear Facilities.
  - Continued efforts in supporting annual review of the J.3 Service Delivery Documents.
  - Draft ICD for MSA Electrical Utilities is currently routing to Engineering Services and Project personnel for review.
  - Revision of HNF-46148, Water System Services, is in progress. Fire Protection Engineering is aligning Program and Project requirements for demarcations and maintenance responsibilities. These requirements will be added to the document for Water Utilities.
  - Supporting ongoing discussions with WRPS regarding the future use of the existing ERDF Leachate Transfer Line and additional tie-in interfaces related to the new Leachate Transfer Line to the 200W P&T.

- o J.3 Table Maintenance:
  - In process updates being tracked for the RCCC Transition effort. Team meetings with MSA/WRPS to work on updates to the J.3 table has been scheduled.
- o J.13/J.14 Tables Maintenance:
  - The internal review package for the latest J.13/J.14 table updates has been sent out to the Projects. This update will incorporate the recent transfer of ETF operations to WRPS among other assignments.
  - In process updates being tracked for the RCCC Transition effort.
- o Internal Operations:
  - Completed internal work site assessment of MSA Usage Based Service Statements of Work. Corrective action development is underway.
  - Drafted two new AIAs to support the RCCC transition. The first, related HLAN conversion in the 300 Area is in final release and the second for sharing of resources is routing for final concurrence.
  - Completed Interface Management Planning activities for the RCCC Transition and began working to close Interface Management RCCC Transition Item Checklist items for the 324 Project Transition (i.e. J.3 Table update, J.13/J.14 updates, and Interface Agreement updates).
- **Information Management:**
  - o Provided 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 and implemented new Other Hanford Contractor releases in support of MSA Software Engineering Services and Content and Records Management transitions.
  - o Processed 15,198 Electronic Records into the Integrated Document Management System (IDMS).
- **Performance Analysis and Risk Management Integration (PARMI):**
  - o The Monthly meeting between the PARMI, Contractor Assurance and Regulatory Reporting, and Projects was held on February 16, 2016. The purposes of the monthly meetings are to review productivity data, to determine if trends exist across the CHPRC, and to provide recommended actions related to Corrective Actions. Company level metrics are being evaluated by the PARMI organization, in addition to Project specific metrics that are evaluated at the Project level. The KBOPR and SGRP organizations are presenting their data/evaluations as a part of the Project monthly Continuous Improvement Meetings. “Dashboard Metrics” are being tracked on the Productivity Tracking Log (PTL) web page. Field Presentations and Training continued to be provided. The pilot to automate Field Execution Schedule item integration into the PTL continued into February.
  - o Technical and Administrative support was provided to the STP in responding to the DOE-HQ led External Independent Review/Independent Cost Estimate (EIR/ICE) reviews. Both review teams performed the on-site portion of their reviews the week of November 16, 2015. Actions identified during the Exit Briefing and in the formal report are being tracked. The EIR Team identified a total of 19 findings with eight classified as major findings. Clarification provided by the project team (RL and CHPRC) resulted in reclassification or deletion of four of the eight major findings. RL and CHPRC have provided factual accuracy feedback and have submitted a Correction Action Plan (CAP) in response to the findings, Communication continues with both RL and the EIR/ICE teams to finalize and close actions.
  - o 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. A Draft version of the PRC Procedure System (PPS) document that will replace PRC-MD-PM-53058 (PRC-PRO-PM-53101, *CHPRC Productivity Tracking Log/Reporting*) was routed for formal review in February; publication is expected in March.
- o Progress continues to be made towards completion of the Productivity Corrective Actions. Completed 20 of 24 actions (83 percent). Two items are scheduled for completion in March.
  - o PARMi Risk Management staff provided Risk Analysis for the PFP, STP CAP, the WESF Stabilization and Ventilation Project, and numerous BCRs.
  - o Risk Management, Requirements Management, and Business Process Evaluation support was provided to the RCCC Transition Team. PARMi staff met with WCH Risk Management/Requirements Management staff in support of transition of WCH work scope to CHPRC. The PARMi Risk Transition team provided a progress presentation to the RCCC Executive Advisory Team on February 18. Program information was provided by the WCH staff. These efforts are expected to continue over the next several months.
  - o Closure of the Hanford Concerns Council contract was completed in February. Steps were initiated to competitively solicit offers for a replacement contract. Expressions of interest were received in February; proposals are expected to be received in March.
  - o An initial internal review of the revision to CHPRC-MP-MS-19361, *CH2MHill Plateau Remediation Company Project Execution Plan*, was completed in January. An advance copy of the revised document was transmitted to the RL for review and comment prior to official transmittal for concurrence; preliminary RL comments were incorporated and the internal CHPRC formal review was completed in February. A formal transmittal letter was sent to RL on March 2, 2016.

### Project Technical Services (PTS)

- **Engineering Services:**
  - o W-130, Engineered Contain Retrieval and Transfer System (ECRTS), and 200 West P&T Facility engineering assistance.
  - o Sitewide electrical safety program procedure revision impact analysis.
  - o Assigned Chief Engineer (TC Oten) to assist PFP, assigned Acting Chief Engineer (SH Crow).
- **Procedures and Training:**
  - o Supported Building 324 transition.
  - o Supported multiple DOE assessments.
- **Operations Program:**
  - o Continued working with projects, Fire Protection Engineering, and MSA Fire Systems Maintenance to finalize an Interface Agreement for performance of maintenance on Fire Protection System equipment.
  - o Updated qualification cards for Controlling Organization (CO) Lockout/Tagout (LOTO) Administrator (600605) and CO LOTO Designating Manager (600606) to support implementation of DOE-0336, Revision 2A.
  - o Conducting Building 324 Transition site visits, program review and transition documentation (Transition Checklists).
  - o Supported CHPRC and Washington River Protection Solutions REDOX/222S Seismic event responses with Defense Nuclear Facilities Safety Board.
  - o 100 Areas Protective Action Drill completed.
  - o Updating Building Emergency Plan for the Integrated Disposal Facility (IDF)
- **Project Delivery:**
  - o ERDF Transfer Line:
    - Completed bonding of reused 3” high-density polyethylene (HDPE) line to 200 West P&T.
    - Earthwork berm 50 percent complete, commenced construction of pipe anchors.

- Completed 6 of 6 road crossings.
- Completed excavation and installation of underground fiber conduit.
- Commenced excavation around UP-1 pit 4.
- Project completion date on track to complete end of April.
- o W-130 Stabilization:
  - Completed with the exhaust skid foundation work.
  - Offsite core drilling mock up commenced. Core drilling demonstration of 16' wall successfully completed. Core drilling demonstration of cover block to complete.
  - Offsite exhaust skid refurbishment continued.
- o 289T FBR and CS platforms:
  - Continued field erection of the FBR platform structural steel.
  - Steel delivered for the CS 6-PAK tanks.
- o REDOX Roof Design:
  - Completed 3<sup>rd</sup> party independent review off final design by CH2M (Boise) – working comment resolution with Contractor
- o Trench 94 Reactor Component Disposal Package Maintenance:
  - Processing Contractor deliverables and Commenced draft of Navy deliverables (Safety, Quality and Waste Management Plans).
- **KW Annex Construction:**
  - o Completed Construction Completion Documentation (CCD) for both Contractors (FE&C and Ojeda).
  - o Completed resolution of fire ATP test deficiencies.
  - o Submitted completion documentation to CHPRC contracts for PM-12-3-16.
  - o Off loaded truck scale (weigh bridge) into the lay down yard.
- **Preventative Maintenance:**
  - o Issued Limited Notice to proceed for preventative maintenance contract for the Annex building mechanical systems (i.e. Compressor/HVAC).
  - o Continued work planning process for preventative maintenance activities – target start in the field week of February 29, 2016.
- **KW Basin Equipment installation:**
  - o Completed Enhanced Work Planning (EWP) for NE Corner Interference Removal work package.
- **105 KW Basin Re-Lidding Construction:**
  - o Completed Relidding activities.
  - o Completed removal of top two sections and installation of new lid on EC-260 (6 of 6 complete).
  - o Completed installing permanent speed rail on north side of EC openings on EC-210, 220, 230 and 240, 250 and 260 (6 of 6 complete).
  - o Completed Door 146A modification and started removal of exterior barrier.

- **KW Basin In Basin Modifications Construction:**
  - o Contractor mobilization and started NE corner electrical interference removal.
- **T Plant Modification Construction:**
  - o IP-2 waste containers for packaging the North Load-out Pit (NLOP) equipment transferred from 100K to T-Plant on February 3, 2016.
  - o EWP for NLOP removal continues.
    - Completed a focused working session on February 12, 2016 with subject matter experts (SME) and Project, Facility, Contractor and Craft personnel.
    - Completed the T-Plant Canyon entry on Thursday, February 18, 2016 in support of the EWP.
  - o Continued procurement of buyer-furnished material and personal protective equipment.
  - o Secured a flatbed trailer for hauling IP-2 waste containers into and out of the T-Plant Tunnel loading bay.

### **Communications**

- o Communications developed a press release and supporting social media posts regarding the removal of the high hazard glove boxes from the PFP, resulting in coverage from the *Tri-City Herald* and on local television and radio stations.
- o Communications supported media inquiries from the *Tri-City Herald* and *Weapons Complex Monitor* related to safety issues and management changes at the PFP.

## 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	0.4	0.3	0.2	(0.1)	-27.7%	0.1	23.7%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	(0.0)	-21.3%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	1.6%
Communications	0.1	0.1	0.1	0.0	0.0%	(0.0)	-15.1%
Safety, Health, Security and Quality	1.1	1.1	0.9	0.0	0.0%	0.2	14.1%
Environmental Program and Strategic Planning	0.4	0.4	0.3	0.0	0.0%	0.0	10.1%
Business Services	1.5	1.5	1.4	0.0	0.0%	0.1	7.6%
Prime Contract and Project Integration	1.5	1.5	1.4	0.0	0.0%	0.1	6.0%
Project Technical Services	0.5	0.5	0.4	0.0	0.5%	0.1	15.6%
<b>Indirect WBS 000 Total</b>	<b>5.8</b>	<b>5.7</b>	<b>5.1</b>	<b>(0.1)</b>	<b>-2.0%</b>	<b>0.5</b>	<b>9.4%</b>

Numbers are rounded to the nearest \$0.1M.

#### Indirect WBS 000

##### CM Schedule Performance: (-\$0.1M/-2.0%)

The variance is within reporting thresholds.

##### CM Cost Performance: (+0.5M/+9.4%)

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	1.4	1.8	1.9	0.4	26.8%	(0.0)	-2.1%	3.2
Internal Audit	0.4	0.4	0.4	0.0	0.0%	0.1	14.5%	1.1
General Counsel	0.6	0.6	0.4	0.0	0.0%	0.2	31.7%	1.5
Communications	0.4	0.4	0.4	0.0	0.0%	(0.0)	-7.4%	1.0
Safety, Health, Security and Quality	5.6	5.6	4.8	0.0	0.0%	0.8	14.8%	14.8
Environmental Program and Strategic Planning	1.9	1.9	1.7	0.0	0.0%	0.2	10.0%	5.0
Business Services	7.8	7.8	6.2	0.0	0.0%	1.6	20.3%	20.7
Prime Contract and Project Integration	7.8	7.8	7.9	0.0	0.0%	(0.0)	-0.6%	20.7
Project Technical Services	2.6	2.6	2.4	0.0	0.3%	0.2	7.7%	6.9
<b>Indirect WBS 000 Total</b>	<b>28.6</b>	<b>29.0</b>	<b>26.0</b>	<b>0.4</b>	<b>1.4%</b>	<b>2.9</b>	<b>10.1%</b>	<b>75.0</b>

Numbers are rounded to the nearest \$0.1M.

### Indirect WBS 000

#### FYTD Schedule Performance: (+\$0.4M/+1.4%)

The variance is within reporting thresholds.

#### FYTD Cost Performance: (+2.9M/+10.1%)

The favorable variance is primarily due to an unplanned credit realized as a staff aug cost. The credit is from the liquidation of a general ledger account that collects rate adjustments on closed contracts.



## RISK MANAGEMENT STATUS

<p><b>Unassigned Risk</b></p> <p><b>Risk Passed</b></p> <p><b>New Risk</b></p> <p><b>Change</b></p>	<p> Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.</p> <p> Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.</p> <p> Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.</p>	<p> Increased Confidence</p> <p> No Change</p> <p> Decreased Confidence</p>
---	---	--

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>February</b> .																														
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																														
PRC-022: Higher Than Anticipated Attrition  <b>Risk Handling Strategy:</b> Avoid  <b>Probability:</b> Likely (75% to 90%) <b>Worst Case Impacts:</b> \$5 million, 40 days	Higher than planned attrition or staffing reduction is experienced resulting in project schedule delays, and increased training costs.			<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 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>Implement salary increase fund</td> <td rowspan="7" style="text-align: center; vertical-align: middle;">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>38</td> </tr> <tr> <td>Continue PFP resource transition plan for FY2016</td> <td>9/30/16</td> <td>38</td> </tr> <tr> <td>River Corridor Closure recruitment for FY2016</td> <td>9/30/16</td> <td>38</td> </tr> </tbody> </table>	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	38	Continue PFP resource transition plan for FY2016	9/30/16	38	River Corridor Closure recruitment for FY2016	9/30/16	38
				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	38																							
Continue PFP resource transition plan for FY2016	9/30/16	38																												
River Corridor Closure recruitment for FY2016	9/30/16	38																												
<b>Recovery Action Assessment:</b> No changes in the month of <b>February</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.																														
<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>February</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>February</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



February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

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



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

**February 2016  
CHPRC-2016-02, 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 in-situ size reduction of Glovebox HA-9A
- Duct Level:
  - o Removed Filter Box 3P and Filter Box 24 in Room 308
  - o Removed the remainder of the product transfer line in Room 262

## MAJOR ISSUES

### 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 (MSA) 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 MSA 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.

Additional equipment (Scott-brand regulators) was found with contamination at the Hanford Fire Department. This was deemed to be associated with the same causal evaluation as the vortex coolers.

The Root Cause was determined to be that the procedure/process was less than adequate. The development of a clearance survey plan did not require any verification or validation of assumptions. The clearance survey plan that had allowed the clearance (release) of this equipment using a 67 percent

confidence level survey (this only requires a survey of 50 percent of the surface area). Assumptions were made in the development of the CSP, but were not documented (not required at the time), the assumptions were not verified/validated (not required at the time), no management approval required (not required at the time). This process has been revised to require formal training for both the author and the peer reviewer, documentation of all assumptions – to include a verification/validation of assumptions and a review by the RadCon Manager.

### 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 stoplight chart:</b> No major changes to the monthly stoplight chart in the month of <b>February</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>February</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			<b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016.		
				<b>Mitigation action(s)</b>	<b>FC Date</b>	<b>%</b>
				None identified at this time.	N/A	N/A
<b>Mitigation Assessment:</b> No change in the month of <b>February</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. 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.						
<b>High Risk Threat Value</b> (Recoverable slip to enforceable or incentivized milestone)						
<b>FY2016 Risk Triggers</b> (Risk could be realized in FY2016)						

<p>PFPP-GB-08: KPP Room Recovery After Contamination Event</p>	<p>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</p>			<p><b>Risk Trigger:</b> During insitu size reduction activities within RMA/RMC (9A, 9B, 18M).</p> <table border="1" data-bbox="886 268 1570 317"> <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>                  In the month of February the project completed the last size reduction activity. This risk no longer exists and will be closed out in the month of March. 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>PFPP-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   <b>Probability:</b> Low (10% to 25%)  <b>Worst Case Impacts:</b> \$0, 16 days                   *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).</p> <table border="1" data-bbox="886 604 1570 653"> <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>                  Bulk area cleanout efforts have been completed in "A" line. "C" line activities are expected to be completed in early April 2016 after which this risk can be closed. 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	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
<p><b>Unassigned Risks</b> (Pending ownership of identified risks/opportunities)</p> <p>No unassigned risks identified for RL-0011 in the month of February.</p>										

**Critical Path Schedule**

The critical path for this project runs through PFP non-capital asset activities. The 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.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PFP Facility Transition and Selection Disposition Activities	09/30/16		*6/22/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, safety pause associated with a radiological event, and reduction to five field work teams vs. eight caused the Tri-Party Agreement milestone projected completion date to slip an additional 110 calendar days for the forecast date in the January report. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, efficiencies will continue to be evaluated and implemented to recover schedule delays. However, this Tri-Party Agreement completion is not expected to be met.

\* Project Manager Assessment is completed by 4/30/2017. The current Forecast Date of 6/22/2017 does not factor in crew alignment.

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

None identified at this time.

# RL-011.C1

## Contract Performance Reports

**Format 1 - Work Breakdown Structure**

**Format 2 - Organizational Categories**

**Format 3 - Baseline**

**Format 4 - Staffing**

**Format 5 - Explanation and Problem Analysis**



February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

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

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

<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)		a. FROM (YYYYMMDD) 2016 / 01 / 25											
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 02 / 21											
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18											
<b>5. CONTRACT DATA</b>																	
a. QUANTITY 1	b. NEGOTIATED COST 317,545	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 9,878	e. TARGET PRICE 327,423	f. ESTIMATED PRICE 346,035	g. CONTRACT CEILING 327,423	h. ESTIMATED CONTRACT CEILING 346,035										
<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		333,764			c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)										
b. WORST CASE		336,157															
c. MOST LIKELY		336,157	317,545	-18,612													
<b>8. PERFORMANCE DATA</b>																	
CAPN-PBS Control Account.PARS 2 WBS (2)		CURRENT PERIOD			CUMULATIVE TO DATE			REPROGRAMMING ADJUSTMENTS			AT COMPLETION						
ITEM (1)	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)							
RL-0011 Nuclear Mat Stab & Disp PFP																	
RL 0011 C1.02 Maintain Safe & Compliant PFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
RL 0011 C1.05 Disposition PFP Facility	165	460	305	295	155	235,177	234,051	258,245	-1,126	-24,194	0	0	0	235,514	260,976	-25,462	
RL 0011 C1.06 Project Management & Support	0	0	0	0	0	11,990	11,990	12,477	0	-487	0	0	0	11,990	12,477	-487	
RL 0011 C1.90 Usage Based Services Distributions -PBS RL-11	0	0	0	0	0	7,221	7,221	7,731	0	-510	0	0	0	7,221	7,731	-510	
RL 0011 C1.98 Ramp-up and transition	0	0	0	0	0	19,399	19,399	19,253	0	147	0	0	0	19,399	19,253	147	
RL 0011 C1.99 PBS RL-11 UBS, G-n-A, Direct Distrib	0	0	0	0	0	41,028	41,028	33,328	0	7,700	0	0	0	41,028	33,328	7,700	
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d. UNDISTRIBUTED BUDGET																	
e. SUBTOTAL	165	460	305	295	155	314,814	313,689	331,032	-1,126	-17,344	0	0	0	315,152	333,764	-18,612	
f. MANAGEMENT RESERVE															2,393		
g. TOTAL	165	460	305	295	155	314,814	313,689	331,032	-1,126	-17,344	0	0	0	317,545			
<b>9. RECONCILIATION TO CONTRACT BUDGET BASELINE</b>																	
a. VARIANCE ADJUSTMENT																	
b. TOTAL CONTRACT VARIANCE															317,545	333,764	-16,219

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

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

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

<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)		a. FROM (YYYYMMDD) 2016 / 01 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 02 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group  ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK	VARIANCE		BUDGETED COST		ACTUAL COST WORK	VARIANCE		COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
	WORK SCHEDULED (2)	WORK PERFORMED (3)	(4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	(9)	SCHEDULE (10)	COST (11)	(12a)	(12b)	(13)	(14)	(15)	(16)
35 - Business Services	0	0	0	0	0	60,427	60,427	52,580	0	7,847	0	0	0	60,427	52,580	7,847
3B - PFP Closure Project	165	460	305	295	155	254,387	253,262	278,452	-1,126	-25,191	0	0	0	254,725	281,184	-26,459
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET																
e. SUBTOTAL (Performance Measurement Baseline)	165	460	305	295	155	314,814	313,689	331,032	-1,126	-17,344	0	0	0	315,152	333,764	-18,612
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	165	460	305	295	155	314,814	313,689	331,032	-1,126	-17,344	0	0	0	317,545		

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT													Form Approved						
FORMAT 3 - BASELINE										DOLLARS IN THOUSANDS			OMB No. 0704-0188						
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:				3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009			RL_0011_C1 - PFP D&D (ARRA/Base)			4. REPORT PERIOD a. FROM: 2016/01/25 b. TO: 2016/02/21						
5. CONTRACT DATA																			
a. ORIGINAL NEGOTIATED COST 317,546			b. NEGOTIATED CONTRACT CHANGE \$0		c. CURRENT NEGOTIATED COST (A + B) \$317,546		d. ESTIMATED COST AUTH UNPRICED WORK \$0		e. CONTRACT BUDGET BASE (C + D) \$317,546			f. TOTAL ALLOCATED BUDGET \$317,545		g. DIFFERENCE (E - F) \$1					
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008			j. PLANNED COMPL DATE 9/30/2018			k. CONT COMPLETION DATE 9/30/2018				l. EST COMPLETION DATE 9/30/2018						
6. PERFORMANCE DATA																			
ITEM  (1)			BCWS CUM TO DATE (2)		BCWS FOR REPORT PERIOD (3)		SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)					UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)
							+1 Mar-16 (4)	+2 Apr-16 (5)	+3 May-16 (6)	+4 Jun-16 (7)	+5 Jul-16 (8)	+6 Aug-16 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)		
a. PM BASELINE (BEGIN OF PERIOD)			314,649	165	183	0	0	0	0	0	302,288	4,109	7,749	890	116	0	0	315,152	
b. BASELINE CHANGES AUTH DURING REPORT PERIOD None during the reporting period													0	0	0	0		0	
c. PM BASELINE (END OF PERIOD)			314,814	165	183	0	0	0	0	0	302,288	4,109	7,749	890	116	0	0	315,152	
7. MANAGEMENT RESERVE																			
8. TOTAL																			

CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT  
FORMAT 4 - STAFFING**

Dollars in: FTE

FORM APPROVED  
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 RL_0011_C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2016 / 01 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 02 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group		ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)											AT COMPLETION (15)
ORGANIZATIONAL CATEGORY (1)				SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS					
				+1 MAR 2016 (4)	+2 APR 2016 (5)	+3 MAY 2016 (6)	+4 JUN 2016 (7)	+5 REMAIN FY16 (8)	+6 FY17 (9)	FY18 (10)	FY19-FY24 (11)	ATCOMPLETE (12)	(13)	(14)	
35 - Business Services		0	17	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project		26	15351	22	1	20	1	9	50	0	0	0	0	0	15453
<b>g. TOTAL DIRECT</b>		<b>26</b>	<b>15368</b>	<b>22</b>	<b>1</b>	<b>20</b>	<b>1</b>	<b>9</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15470</b>

CLASSIFICATION (When Filled In)



# Appendix C.2

## Capital Asset Project

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



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

**February 2016**  
**CHPRC-2016-02, 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

- Preparing implementation of HNF-15500 “PFP Deactivation and Decommissioning Documented Safety Analysis” Revision 13 and HNF-15502 “PFP Deactivation and Decommissioning Technical Safety Requirements” Revision 13. Awaiting SER from RL to begin formal IVR process.

## MAJOR ISSUES

### Issue:

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

### Corrective Action:

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

### Status:

- Waste packaging instructions for J Pan wastes were developed and waste has been packaged per the waste packaging instructions.
- PFP is performing 100 percent visual inspections of waste drums that contain PRF canyon waste prior to shipment.
- Waste Shipment of PRF Canyon Waste to CWC has commenced with shipment of Non-J Pan wastes; J Pan wastes are being held at PFP pending Laboratory Analysis Results which are expected to be complete in late March.

## 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	2/16/16	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.C3 (CAP.2)</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>February</b> .																			
<b>Realized Risks (Risks that are currently impacting project cost/schedule)</b>																			
No realized risks identified for RL-0011/WBS-011.05.C3 (CAP.2) in the month of <b>February</b> .																			
<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:</b> Accept  <b>Probability:</b> Low (10% to 25%) <b>Worst Case Impacts:</b> \$150K, 44 days	<span style="color: green; font-size: 20px;">●</span>	<span style="color: black; font-size: 20px;">↔</span>	<b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016.  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <b>Mitigation Assessment:</b> No change in the month of <b>February</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. PFP will continue to adhere to the CHPRC ISMS program/ hoisting and rigging program to include detailed analyses of potential hazards and identification of preventive measures to implement prior to starting the work. At this time no alternative course of actions needed.	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A									
Mitigation action(s)	FC Date	%																	
None identified at this time.	N/A	N/A																	
PFP-DEMO-07: Removal/Extraction of Equipment Takes Longer Than Planned	Controlled demolition of equipment, gloveboxes, and portions of the cross-cutting process support systems (i.e. ventilation) result in cost impacts, and schedule delays. <b>Risk Handling Strategy:</b> Control  <b>Probability:</b> Medium (26% to 74%) <b>Worst Case Impacts:</b> \$1.5 million, 45 days	<span style="color: green; font-size: 20px;">●</span>	<span style="color: black; font-size: 20px;">↔</span>	<b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016. Dates tracked in the FES.  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Submit safety basis documents that allow for additional equipment (e.g., 242-Z Tanks) to be left in place for removal during demolition.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Identify and pre-rig equipment with lifting slings.</td> <td style="text-align: center;">6/01/17</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Apply fixative to internals of equipment intended to be removed during demolition to contain contamination.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <b>Mitigation Assessment:</b> In the month of February, it was identified that the forecasted completion date only captured the identification of equipment needs. The forecasted date has been revised to include the actual field work to install the lifting slings. The ~15 month delay does not impact the work scope to extract identified equipment during demolition. At this time no alternative course of actions needed.	Mitigation action(s)	FC Date	%	Submit safety basis documents that allow for additional equipment (e.g., 242-Z Tanks) to be left in place for removal during demolition.	Complete	100	Identify and pre-rig equipment with lifting slings.	6/01/17	50	Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.	Ongoing	N/A	Apply fixative to internals of equipment intended to be removed during demolition to contain contamination.	Ongoing	N/A
Mitigation action(s)	FC Date	%																	
Submit safety basis documents that allow for additional equipment (e.g., 242-Z Tanks) to be left in place for removal during demolition.	Complete	100																	
Identify and pre-rig equipment with lifting slings.	6/01/17	50																	
Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.	Ongoing	N/A																	
Apply fixative to internals of equipment intended to be removed during demolition to contain contamination.	Ongoing	N/A																	
<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-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.	<span style="color: green; font-size: 20px;">●</span>	<span style="color: black; font-size: 20px;">↔</span>	<b>Risk Trigger:</b> During pre-demolition/demolition activities in FY2016. Dates tracked in the FES.  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <b>Mitigation Assessment:</b> No change in the month of <b>February</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. PFP will continue to develop work plans to incorporate required controls. At this time no alternative course of actions needed.	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A									
Mitigation action(s)	FC Date	%																	
None identified at this time.	N/A	N/A																	
<b>Unassigned Risks (Pending ownership of identified risks/opportunities)</b>																			

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
<b>RL-0011/WBS-011.05.C3 (CAP.2)</b>				
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	<p>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.</p> <p><u>CHPRC Comment:</u> The rework required between the first submittal on May 26, 2015, through the resubmittal on August 27, 2015, (Reference 2) and subsequent approval on October 8, 2015, (Reference 1) has increased cost of demolition and impacted schedule. The additional cost is due to a technical difference in the readiness scoring by RL that is not consistent with historical scoring. The addition of a readiness team and performance of an exercise versus a drill have impacted the project. The additional requirements may represent realization of previously identified risk PRC-010, Requirements Change. Accordingly, CHPRC is entitled to an adjustment to cost and fee to implement the direction. <b>In December, a notice of change was sent to RL for the potential change. The letter was re-submitted based on RL feedback.</b></p>			

**Critical Path Schedule**

The critical path for this project runs through PFP non-capital asset activities. The 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		*6/22/17	Stop works associated with PremAire breathing air suits/hoses in support of in-situ size reduction efforts, stop works associated with intrusive work in the 234-5Z duct level, safety pause associated with a radiological event, and reduction to five field work teams vs. eight caused the Tri-Party Agreement milestone projected completion date to slip an additional 61 calendar days for the forecast date in the January report. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, efficiencies will continue to be evaluated and implemented to recover schedule delays. However, this Tri-Party Agreement completion is not expected to be met.

\* Project Manager Assessment is completed by 4/30/2017. The current Forecast Date of 6/22/2017 does not factor in crew alignment.

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

None identified at this time.

# RL-011.C2

## Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



February 2016  
CHPRC-2016-02, Rev. 0  
Contract DE-AC06-08RL14788  
Deliverable C.3.1.3.1 - 1



CLASSIFICATION (When Filled In)

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

DOLLARS IN Thousands of \$

FORM APPROVED  
OMB No. 0704-0188

<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_C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2016 / 01 / 25	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2016 / 02 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

WBS. Resp Org Group  ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)							
3B - PFP Closure Project	556	812	660	256	152	7,719	7,595	7,074	-124	521	0	0	0	47,529	43,218	4,312	
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d. UNDISTRIBUTED BUDGET																	
e. SUBTOTAL (Performance Measurement Baseline)	556	812	660	256	152	7,719	7,595	7,074	-124	521	0	0	0	47,529	43,218	4,312	
f. MANAGEMENT RESERVE														4,154			
g. TOTAL	556	812	660	256	152	7,719	7,595	7,074	-124	521	0	0	0	51,683			

CLASSIFICATION (When Filled In)



CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT  
FORMAT 4 - STAFFING**

Dollars in: FTE

FORM APPROVED  
OMB No. 0704-0188

<b>1. CONTRACTOR</b>		<b>2. CONTRACT</b>		<b>3. PROGRAM</b>			<b>4. REPORT PERIOD</b>	
<b>a. NAME</b> CH2M HILL Plateau Remediation Company		<b>a. NAME</b> Plateau Remediation Contract		<b>a. NAME</b> RL_0011_C2 PFP Demolition Capital Asset Project			<b>a. FROM (YYYYMMDD)</b> 2016 / 01 / 25	
<b>b. LOCATION (Address and ZIP Code)</b> Richland, WA		<b>b. NUMBER</b> RL14788		<b>b. PHASE</b>			<b>b. TO (YYYYMMDD)</b> 2016 / 02 / 21	
<b>c. TYPE</b> CPAF		<b>d. SHARE RATIO</b>		<b>c. EVMS ACCEPTANCE</b> <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18				

5. PERFORMANCE DATA														
WBS. Resp Org Group  ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)											AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS					
			+1 MAR 2016 (4)	+2 APR 2016 (5)	+3 MAY 2016 (6)	+4 JUN 2016 (7)	+5 REMAIN FY16 (8)	+6 FY17 (9)	FY18 (10)	FY19-FY24 (11)	ATCOMPLETE (12)	(13)	(14)	
3B - PFP Closure Project	6	23	0	1	0	0	41	930	0	0	0	0	0	995
<b>g. TOTAL DIRECT</b>	6	23	0	1	0	0	41	930	0	0	0	0	0	995

CLASSIFICATION (When Filled In)

**CLASSIFICATION (When Filled In)**

**CONTRACT PERFORMANCE REPORT  
FORMAT 5 - Explanations and Problem Analysis**

**FORM APPROVED  
OMB No. 0704-0188**

<b>1. CONTRACTOR</b>	<b>2. CONTRACT</b>	<b>3. PROGRAM</b>	<b>4. REPORT PERIOD</b>
<b>a. NAME</b> CH2M HILL Plateau Remediation Company	<b>a. NAME</b> Plateau Remediation Contract	<b>a. NAME</b> RL_0011_C2 PFP Demolition Capital Asset Project	<b>a. FROM</b> (YYYYMMDD) 2016 / 01 / 25
<b>b. LOCATION (Address and ZIP Code)</b> Richland, WA	<b>b. NUMBER</b> RL14788	<b>b. PHASE</b>	<b>b. TO</b> (YYYYMMDD) 2016 / 02 / 21
	<b>c. TYPE</b> CPAF	<b>d. SHARE RATIO</b>	
		<b>c. EVMS ACCEPTANCE</b> No                      X                      Yes	2009 / 09 / 18

**5. Evaluation**

**Direct Projects**

	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	556	812	660	256	46%	152	19%	1.46	1.23
Cumulative:	7,719	7,595	7,074	-124		-2%	521	7%	0.98
	<b>BAC</b>	<b>EAC</b>	<b>VAC in \$</b>	<b>VAC in %</b>	<b>TCPI to BAC</b>	<b>TCPI to EAC</b>			
At Complete:	47,529	43,218	4,312	9%	0.99	1.10			

**Explanation of Variance/Description of Problem:**

**Schedule Variance:** The current month positive schedule variance is associated with the telescoping dust suppression unit (Telehandler) being received in the current period. The BCWS was in a prior period, resulting in a positive schedule variance for the month. This is partially offset by impacts to the demolition work scope as a result of demolition readiness activities lagging for both ancillary facilities and PRF (236-Z).

**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), and impacts from stop works/safety pauses. This has resulted in less project management support charges than planned in the 011.05.C3.01, PFP Demo Project Management/CD-4 Closeout and 011.05.C3.04 PFP Demolition Cross Cut LOE control accounts during the current period. 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 and radiological controls issues. This is partially offset by MSA resources being assigned to support PFP demolition in January, 2016 in anticipation of the start of demolition in PRF. Because the project is behind schedule in completing the ready for demolition activities, these resources currently have very little work to support.

**Impact:**

**Schedule Impact:** Delayed receipt of the telehandler did not impact the critical path for execution of demolition activities as they are currently slated to begin in the September time frame. However, stop works and safety pauses have impacted the work to ready facilities for demolition resulting in a 91 calendar day impact to the critical path to achieving the TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities, due September 30, 2016. Recovery actions are being reviewed and will be put in place when finalized to support recovery of the schedule delays.

**Corrective Action:**

**Schedule:** Recovery actions are being reviewed and will be put in place when finalized to support mitigation of the schedule delays.

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

**NOTE:** Corrective actions associated with stop works/safety pauses that are impacting the ability to initiate demolition activities in the RL-011.C2 capital asset project are addressed in the Operations and RL-011.C1 capital asset projects corrective action plans respectively.

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

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.

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

- Schedule Margin Analysis: During the month of February the RL-011.C2 Demolition Capital Asset project lost all of the schedule margin from the January reporting period. 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 PremAire Breathing Air radiological event resulting in increased survey requirements for PPE. Overall, the C2 project lost all of its schedule margin.
- IMS Data dictionary Changes: N/A
- Forecast Schedule with No Baseline: N/A
- UB Balance: N/A
- Negative ACWP: N/A
- EAC Analysis: Best Case = EAC; Most Likely = EAC + MR; Worst Case = ECWR or BCWR (whichever is greater) + ACWP + MR + Trend Log values not already included.
- Negative CV > VAC: N/A
- MR Transactions: N/A
- Freeze Period Changes: N/A
- Retroactive Changes: N/A
- Indirect Variances: N/A

**Prepared by:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Approved by:** \_\_\_\_\_ **Date:** \_\_\_\_\_