CHPRC-2019-03
Revision 0

Monthly Performance Report

March 2019

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

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

CH2MHILL
Plateau Remediation Company

P.O. Box 1600
Richland, Washington 99352

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APPROVED
By Janis D. Aardal at 3:14 pm, Apr 25, 2019

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CH2MHILL
Plateau Remediation Company

Monthly Performance Report

L. Ty Blackford
President and Chief Executive Officer

U.S. Department of Energy Contract,
DE-AC06-08RL14788
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EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company (CHPRC) advanced cleanup throughout the Hanford Site during March. Major accomplishments included:

The Central Plateau Risk Management demolition crew completed the removal of degraded outdoor structures at the Central Waste Complex. The crew safely and compliantly removed two structures, providing the project with clean slabs that will support future operations. (Above: before demolition. Below: after demolition.)

- Waste and Fuels Management Project (W&FMP): At the Waste Encapsulation Storage Facility (WESF), the W-135 Management of the Cesium (Cs) and Strontium (Sr) Capsules Project team continued reviewing and working with the subcontractor to incorporate comments to the final Cask Storage System design. The final design for the W-135 Project Maintenance and Storage Facility (MASF) Cs/Sr capsule handling mockup was received from the subcontractor for review. Approval of the mockup design is expected the end of April. The final review for the W-135 Project WESF Modifications Design was initiated on March 6, 2019. Also at WESF, crews completed radiological surveys, removal of radiological contamination and painting in the WESF G Hot Cell as part of the W-135 Project. Engineering and work activities continued to address the historical use of the WESF crane to lift the truckport cover blocks, which were recently determined to exceed the rated capacity of the crane. The waste approval package for the unanticipated liquid recently identified in Tank 100 was sent to Washington River Protection Solutions, Effluent Treatment Facility (ETF) for review and approval on March 18, 2019. Once approved, Tank 100 liquid will be transferred to ETF for treatment and final disposition. Verification of documents for annual multi-canister overpack sampling proficiency demonstration was completed at the Canister Storage Building. At the Central Waste Complex/Low Level Burial Grounds demolition and loadout of 2120WA and 2120WB facilities were completed. At T Plant, Sludge Transport and Storage Container (STSC) 9 filled with 105K West Fuel Storage Basin (105KW Basin) sludge was placed into interim storage on February 28, 2019. The T Plant sludge receipt team supported the receipt of STSC 10 filled with 105KW Basin sludge and placed it into interim storage at T Plant on March 20, 2019.
- Soil and Groundwater Remediation Project (S&GRP): In the 100 Area, drilling was completed on 3 wells and a deep Ringold Upper Mud well was initiated for 100-HR-3. Field work commenced in 100-KR-4 at the Soil Flushing and Treatability Test Site. At the KX Pump and Treat Facility transition of Extraction Well XE4 from well 199-K-141 to well 199-K-234 was completed. At the HX Pump and Treat Facility distributor replacement in the ion exchange vessels C1 and F1 was completed. In the 200 Area, crews completed the alternating frequency drive replacement at Extraction Well YE29 in 200-BP-5.
- Plutonium Finishing Plant (PFP) Closure Project: The PFP team continued preparations for the management assessment that is required to be successfully completed prior to the resumption of higher-risk demolition that

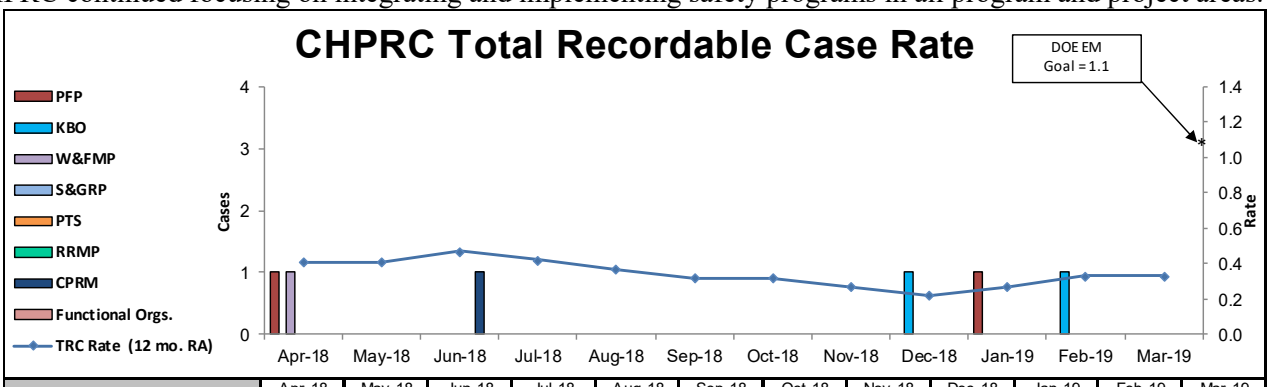
is currently planned for April 22, 2019. Adverse weather required snow and ice removal around the main processing facility to allow crews to safely resume resizing and loadout once the weather improved. Eight containers of existing demolition debris were shipped to the Environmental Restoration Disposal Facility for permanent disposal. Completed the independent Hazard Review Board (HRB) of the higher risk 234-5Z and 236-Z demolition packages. The HRB passed both packages.

- K Basins Operations (KBO): Operators safely filled the STSC 10 with 105KW Basin Engineered Container sludge and delivered the STSC to T Plant. KBO received soil sample results for the remediation of the 116-K East crib. The results identified contamination in the samples and the decision was made to excavate the former crib an additional 12 feet to a depth of 60 feet below ground surface to remove the identified contamination. The project began excavation and loadout for the remediation of Waste Site 100-K-47:1 process sewer line. KBO received RL approval to terminate/cease safeguards for the Attractiveness Level E accountable nuclear material (found fuel specimens) in K West Basin. This clears the way for material processing and conditioning to create an underwater check source for the gamma camera.
- River Risk Management Project (RRMP): Progress continued on work required to remediate the 300-296 Waste Site beneath the 324 Building. Crews at the 324 Building completed the final core drill location required for the installation of the Remote Soil Excavation Operations (RSEO) equipment and initiated the installation of the pilot holes in the basement in support of structural modification. In the 324 Building's hot cells, A Cell workers completed grouting of waste containers for A Cell grout containers. In B Cell workers completed the installation of 5 of 6 tool holders for the remote excavator arm implements, allowing the mobilization and use of additional implements for debris stockpiling. At C Cell workers initiated internal cell sealing and mobilizing the snorkel for installation. At D Cell workers were able to break the seal in the floor to allow bin access between C and D Cells for waste bin movement during RSEO. At the 324 Building mockup, crews began testing of the concrete saw to be installed on the floor of B Cell to create an opening to access the 300-296 Waste Site and continued testing of the radiological assay system. Successful completion of testing of both components is required prior to their installation at the 324 Building.
- Central Plateau Risk Management Project (CPRM): CPRM personnel completed additional combustible material loadout from the Reduction and Oxidation Plant (REDOX) Facility, initiated entry into the REDOX Silo 6th floor craneway, performed steam line asbestos insulation abatement outside of REDOX, and initiated removing steam line crossovers in the 200E Area. Electrical intrusive investigations were completed at 242-B/BL facility as a step in preparing it for deactivation and demolition. Workers used a single-boom pump truck to support the continued filling of the remaining voids in Plutonium Uranium Extraction Plant (PUREX) Tunnel 2 with grout. At month end, PUREX Tunnel 2 was 93 percent filled with grout.

- The President's Zero Accident Council (PZAC) meeting for March was hosted by the Waste & Fuels Management Project (W&FMP). The three main ideas were:
  - Pre-Season.
  - In Season.
  - Post Season.
- Four "*Thinking Target Zero*" (TTZ) bulletins were published to convey important occupational, safety, health, and environmental messages:
  - Rest up for Safety.
  - Wind Hazards.
  - Regulatory Inspections.
  - Health-Safety EXPO.
- *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
  - Three lessons learned:
    - Rocks thrown from the tires of rolling stock (CHPRC).
    - "Step Potential" Education: When Near a Downed Power Line (Mission Support Alliance, LLC [MSA]).
    - Proceeding in the face of uncertainty (Washington River Protection Solutions, LLC).
  - Injuries.
  - Weekly ethics moments.
  - Vehicle events.
  - Spring forward.
  - Need a tow on site?
  - Best practice (MSA) – contract requirements flow-down quarterly verification to avoid scope creep/ scope omission.
  - Eyestrain prevention.
  - Attending a running vehicle.
  - Ladder safety.
  - Bird nesting season.

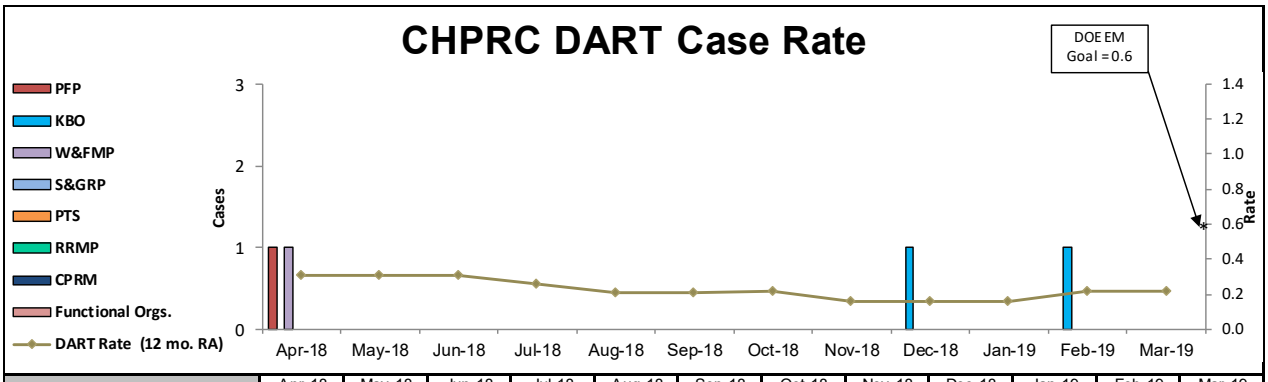
TARGET ZERO PERFORMANCE

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



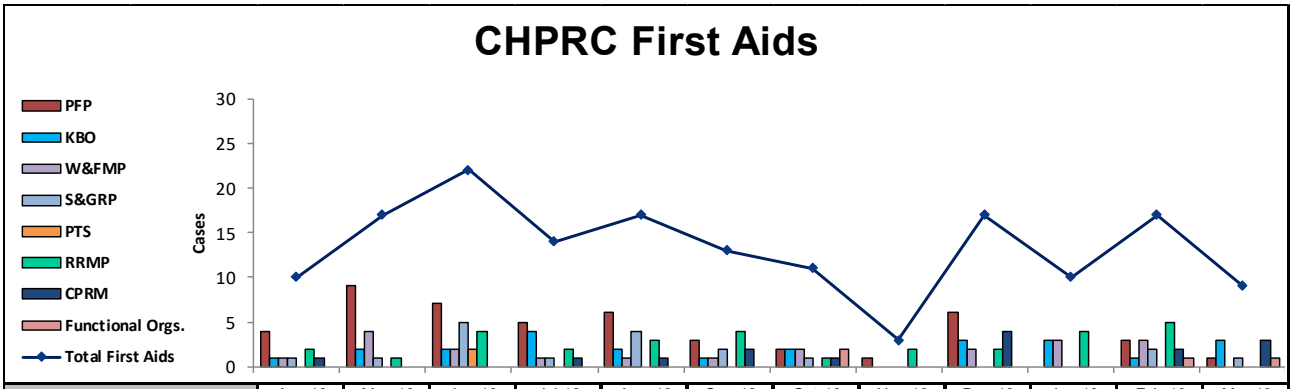
	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
PFP	1	0	0	0	0	0	0	0	0	1	0	0
KBO	0	0	0	0	0	0	0	0	1	0	1	0
W&FMP	1	0	0	0	0	0	0	0	0	0	0	0
S&GRP	0	0	0	0	0	0	0	0	0	0	0	0
PTS	0	0	0	0	0	0	0	0	0	0	0	0
RRMP	0	0	0	0	0	0	0	0	0	0	0	0
CPRM	0	0	1	0	0	0	0	0	0	0	0	0
Functional Orgs.	0	0	0	0	0	0	0	0	0	0	0	0
Recordable Cases	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**0**
TRC Rate (12 mo. RA)	**0.41**	**0.41**	**0.47**	**0.42**	**0.37**	**0.32**	**0.32**	**0.27**	**0.22**	**0.27**	**0.33**	**0.33**

Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.33 is based on a total of six Recordable injuries. March had no reported Recordable cases.



	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
PFP	1	0	0	0	0	0	0	0	0	0	0	0
KBO	0	0	0	0	0	0	0	0	1	0	1	0
W&FMP	1	0	0	0	0	0	0	0	0	0	0	0
S&GRP	0	0	0	0	0	0	0	0	0	0	0	0
PTS	0	0	0	0	0	0	0	0	0	0	0	0
RRMP	0	0	0	0	0	0	0	0	0	0	0	0
CPRM	0	0	0	0	0	0	0	0	0	0	0	0
Functional Orgs.	0	0	0	0	0	0	0	0	0	0	0	0
DART Cases	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**
DART Rate (12 mo. RA)	**0.31**	**0.31**	**0.31**	**0.26**	**0.21**	**0.21**	**0.22**	**0.16**	**0.16**	**0.16**	**0.22**	**0.22**

Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.22 is based upon a total of four Days Away cases. March had no reported DART cases.



	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
PFP	4	9	7	5	6	3	2	1	6	0	3	1
KBO	1	2	2	4	2	1	2	0	3	3	1	3
W&FMP	1	4	2	1	1	1	2	0	2	3	3	0
S&GRP	1	1	5	1	4	2	1	0	0	0	2	1
PTS	0	0	2	0	0	0	0	0	0	0	0	0
RRMP	2	1	4	2	3	4	1	2	2	4	5	0
CPRM	1	0	0	1	1	2	1	0	4	0	2	3
Functional Orgs.	0	0	0	0	0	0	2	0	0	0	1	1
Total First Aids	**10**	**17**	**22**	**14**	**17**	**13**	**11**	**3**	**17**	**10**	**17**	**9**

First Aid Case Summary: CHPRC reported nine first aid cases in March. The contributors were six sprains/strains/pains, two abrasions/bruises/contusions and one miscellaneous (burns, rashes, repetitive motion, etc.) injury. There were five self-treat cases reported in March.

KEY ACCOMPLISHMENTS

Projects

- Refer to Sections A through G, as well as Appendix C of this report, for project specific accomplishments.

Project Services and Support

- Refer to Appendix B of this report for overhead support (which is reported quarterly). For specific project support, refer to Sections A through G, and Appendix C of this report.

MAJOR ISSUES

Projects

- Refer to Sections A through G, as well as Appendix C of this report, for the project-specific major issues.

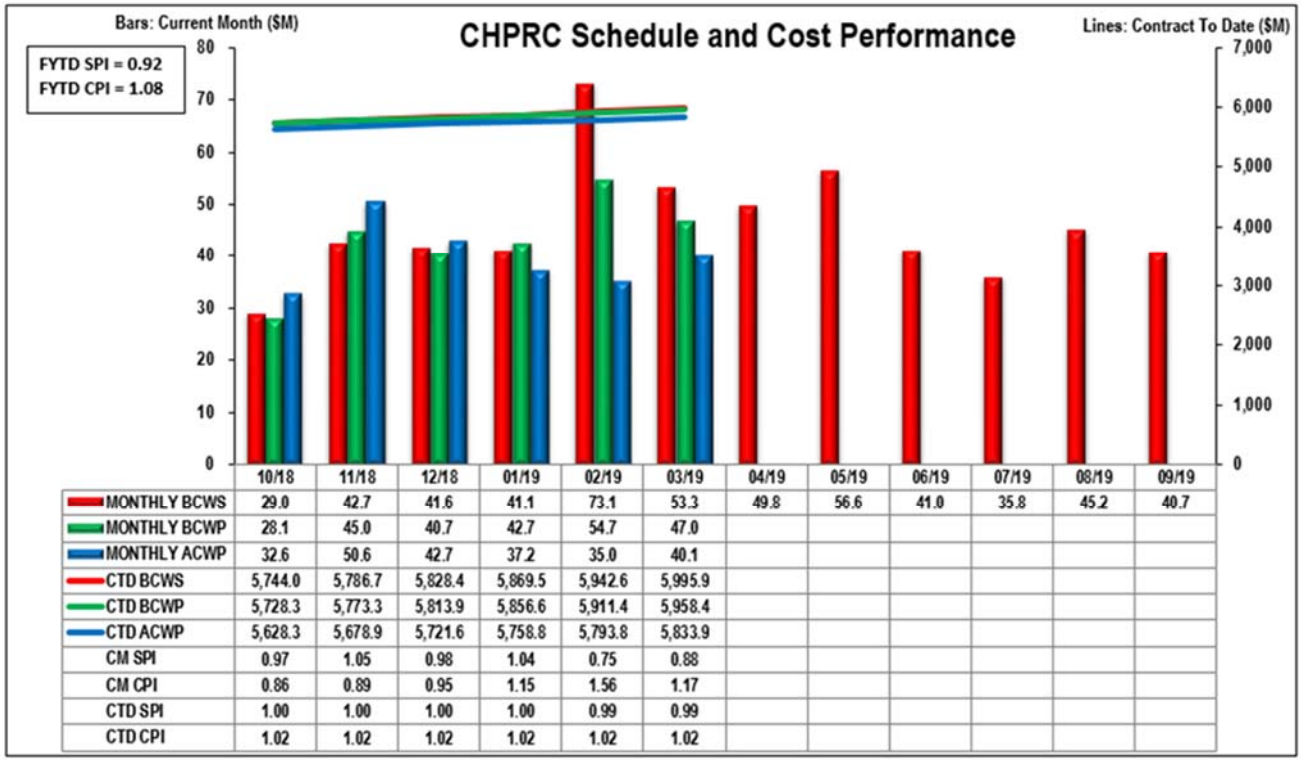
Project Services and Support

Issue:
On December 18, 2017, the U.S. Department of Energy (DOE) published in the Federal Register (82 FR 59947) an update to Title 10, Code of Federal Regulations, Part 851, "Worker Safety and Health" (10 CFR 851). The update incorporated the current consensus safety and health standards with an effective date of January 17, 2018, with compliance required starting January 17, 2019.

Corrective Action:
Proceed with implementation of the technical amendment to 10 CFR 851; however, compliance by the directed deadline of January 17, 2019, was not achieved. Prepare addendum to the FY2019 Change Proposal addressing the impacts and submit to RL for inclusion in the negotiation and definitization of the FY2019 Change Proposal.

Status:
CHPRC submitted an abatement plan to RL to address the hazards since full compliance could not be achieved by January 17, 2019. The plan proposed reaching full compliance by September 30, 2021. Received approval of Worker Safety and Health Description and Technical Amendment Implementation Hazard Abatement Plan from RL on January 17, 2019. The scope for NFPA 70E, Standard for Electrical Safety in the Workplace, was identified and FY2019-FY2021 schedule and cost were submitted. This issue is closed.

EARNED VALUE MANAGEMENT



	10/18	11/18	12/18	01/19	02/19	03/19	04/19	05/19	06/19	07/19	08/19	09/19
MONTHLY BCWS	29.0	42.7	41.6	41.1	73.1	53.3	49.8	56.6	41.0	35.8	45.2	40.7
MONTHLY BCWP	28.1	45.0	40.7	42.7	54.7	47.0						
MONTHLY ACWP	32.6	50.6	42.7	37.2	35.0	40.1						
CTD BCWS	5,744.0	5,786.7	5,828.4	5,869.5	5,942.6	5,995.9						
CTD BCWP	5,728.3	5,773.3	5,813.9	5,856.6	5,911.4	5,958.4						
CTD ACWP	5,628.3	5,678.9	5,721.6	5,758.8	5,793.8	5,833.9						
CM SPI	0.97	1.05	0.98	1.04	0.75	0.88						
CM CPI	0.86	0.89	0.95	1.15	1.56	1.17						
CTD SPI	1.00	1.00	1.00	1.00	0.99	0.99						
CTD CPI	1.02	1.02	1.02	1.02	1.02	1.02						

	$M Current Period					$M Contract to Date					$M Contract Period		
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance				
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance
RL-0011 - Nuclear Materials Stab & Disp PFP	56.5	51.9	4.4	(4.6)	47.5	1081.3	1057.9	1169.5	(23.4)	(111.7)	1,101.6	1,217.2	(115.6)
RL-0012 - SNF Stabilization & Disposition	0.7	0.7	1.4	0.1	(0.7)	751.5	750.5	721.3	(0.9)	29.2	761.1	730.6	30.5
RL-0013 - Solid Waste Stab & Disposition	(2.6)	(1.8)	12.0	0.7	(13.8)	1401.3	1398.3	1312.1	(2.9)	86.2	1,484.1	1,396.7	87.4
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	5.9	6.4	8.7	0.5	(2.3)	1576.9	1576.7	1522.6	(0.2)	54.1	1,645.0	1,586.0	59.0
RL-0040 - Nuc Fac D&D - Remainder	5.7	3.3	4.8	(2.4)	(1.5)	526.8	525.9	501.5	(0.9)	24.5	554.9	534.1	20.8
RL-0041 - Nuc Fac D&D - RC Closure Project	(13.0)	(13.6)	8.7	(0.6)	(22.3)	631.0	621.7	583.9	(9.3)	37.8	690.3	650.8	39.5
RL-0042 - Nuc Fac D&D - FFTF Project	0.1	0.1	0.1	0.0	(0.0)	27.2	27.2	22.8	(0.0)	4.4	28.1	24.2	3.9
Total	53.3	47.0	40.1	(6.3)	6.9	5,995.9	5,958.4	5,833.9	(37.6)	124.5	6,265.1	6,139.7	125.4

(Values are rounded to the nearest $0.1M)
(Values do not have UB breakout)

Performance Summary

CHPRC continues to track completion of the contract scope within budget and is currently projecting a variance at completion (VAC) of $125.4 million, with $63.3 million of management reserve (MR), for a total positive variance of $188.7 million. For March, the project was 11.9 percent behind schedule and 14.7 percent under planned cost. Contract to date (CTD); the project was 0.6 percent behind schedule and 2.1 percent under planned cost.

The current month (CM) negative schedule variance is primarily due to project breakdown structure (PBS) RL-0011 delays in resuming debris disposition and restarting low- and high-risk demolition. The project baseline assumed high risk demolition for 235-Z Facility would be complete in March. However, due to impacts from stop works, the loss of the Decontamination & Decommission (D&D) crews to other Hanford contractor hiring actions, and impacts from adverse weather in February and early March, the project has not yet completed debris disposition. The project is working with RL on a BCR planned for April to draw DOE PFP CAP 2 Project contingency to adjust the project baseline to address the above noted impacts.

Also contributing to the negative schedule variance is PBS RL-0040 due the adverse winter weather conditions experienced in the month. Grout placement activities at Tunnel 2 were put on hold from February 4 through March 11, 2019. Snow build up prevented waste loadout at other facilities into ERDF containers. Equipment surveys were also impacted because of the cold weather; crews could not open doors for ventilation to remove radon from the building in the 202-S Facility. Additionally, field walk-downs for the REDOX complex haul road, trailer, and ventilation procurements were halted due to snow and ice accumulation. Finally, the removal of the 200 West steam lines experienced delays due to accessibility to work areas requiring snow clearance, exterior freezing temperatures not conducive to water application for glove bag abatement, and heavy equipment operators working higher priority snow removal on the Hanford Site. The weather cleared and allowed for steam line removal work to continue the final two weeks of March.

The CM positive cost variance is primarily attributed to implementation of BCR-PRC-19-012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the performance measurement baseline (PMB) from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REA), through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019. The implementation of the global settlement included decreases and increases to budgeted cost of work scheduled and budgeted cost of work performed which netted positive.

The positive cost variance was partially offset by PBS RL-0013 attributed to PFP transuranic (TRU) commercial repackaging and large box commercial transuranic mixed (TRUM) repack group subcontract pricing.

FUNDING ANALYSIS
FY2019 Funds vs. Fiscal Year Spend Forecast
($M)

PBS	Project	FY2019 Projected Funding	FY2019 Spending Forecast	FY2019 Variance
Estimate at Complete				
RL-0011	Nuclear Materials Stabilization and Disposition	70.0	64.2	5.8
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	20.1	17.7	2.5
RL-0012	15-D-401 Sludge Retrieval Project	11.3	0.0	11.3
RL-0013	Waste and Fuels Management Project	173.5	155.2	18.3
RL-0013	Management of Cesium and Strontium Capsules	6.6	2.9	3.7
RL-0030	Soil, Groundwater and Vadose Zone Remediation	132.9	117.8	15.2
RL-0040	Nuclear Facility D&D, Remainder of Hanford	81.8	71.1	10.7
RL-0041	Nuclear Facility D&D, River Corridor	148.3	125.5	22.8
RL-0042	Fast Flux Test Facility Closure	4.3	2.5	1.8
	Total Estimate at Complete	**649.0**	**556.9**	**92.1**
Scope Pending Change Management				
RL-0013	Waste and Fuels Management Project	0.0	0.6	(0.6)
RL-0013	Management of Cesium and Strontium Capsules	0.0	0.0	(0.0)
RL-0030	Soil, Groundwater and Vadose Zone Remediation	0.0	0.4	(0.4)
RL-0040	Nuclear Facility D&D, Remainder of Hanford	0.0	2.7	(2.7)
RL-0041	Nuclear Facility D&D, River Corridor	0.0	0.4	(0.4)
	Total Incremental Work Scope	**0.0**	**4.1**	**(4.1)**
Total Fiscal Year Spend Forecast				
RL-0011	Nuclear Materials Stabilization and Disposition	70.0	64.2	5.8
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	20.1	17.7	2.5
RL-0012	15-D-401 Sludge Retrieval Project	11.3	0.0	11.3
RL-0013	Waste and Fuels Management Project	173.5	155.9	17.6
RL-0013	Management of Cesium and Strontium Capsules	6.6	2.9	3.7
RL-0030	Soil, Groundwater and Vadose Zone Remediation	132.9	118.1	14.8
RL-0040	Nuclear Facility D&D, Remainder of Hanford	81.8	73.8	8.0
RL-0041	Nuclear Facility D&D, River Corridor	148.3	125.9	22.4
RL-0042	Fast Flux Test Facility Closure	4.3	2.5	1.8
	Total	**649.0**	**561.0**	**88.0**

Funds/Variance Analysis

For March, there was no change to overall FY2019 projected funding of $649 million. The spending forecast reduced $10.4 million, primarily to better align to trends for underruns in labor and subcontracts, as well as reductions for scope moving into FY2020.

BASELINE CHANGE REQUESTS

In March 2019, CHPRC approved and implemented four Baseline Change Requests (BCRs) into the PMB budget. Two of the four BCRs impacted the PMB. Each change request is identified in the tables below:

Change Request #	Title	PBS	Summary of Change
BCR-013-19-006R0	*W-135 Scope Realignment for Operating Margin Analysis*	RL-0013	This BCR incorporated the revised strategy to perform the analysis of the reduction in cesium salt-interface temperature following completion of the final design. This BCR did not change the PMB value.
BCR-PRC-19-012R0	*Mod 684 – Implement Global Settlement*	000, RL-0011, RL-0012, RL-0013, RL-0030, RL-0040, RL-0041, RL-0042	This BCR implemented the global settlement agreement documented by PRC Contract Modification 684. This BCR increased the PMB value by $6,622K.
BCRA-PRC-19-011R0	*HPIC Updates March 2019*	RL-0011, RL-0013, RL-0030	This BCR incorporated March FY2019 Hanford Programs Integrated Control Module (HPIC) updates. This BCR did not change the PMB value.

The allocated (distributed) budget increased by $6,622K.

Undistributed Budget (UB) Activity

BCR Number	Title	PBS	Fiscal Year	UB
BCR-PRC-19-010R0	*Undistributed Budget Adjustments March 2019*	000, RL-0011, RL-0012, RL-0013, RL-0030, RL-0040, RL-0041	2019	-$175,357.8K

The UB decreased $175,357.8K in March.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
N/A	*N/A*	N/A	2019	$0

There was no change to MR in March.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
BCR-PRC-19-012R0	*Mod 684 – Implement Global Settlement*	RL-0013, RL-0040, RL-0041	2019	$13,165K

The fee increased $13,165K in March.

See the Format 3 Report in Appendix A for a listing of the specific change requests that had an impact on the PMB budget by FY. The PMB values of change requests are summarized by FY in the following tables (dollars in thousands).

March 2019 Summary of Changes

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	FY2019	Contract Period Total	Total PMB
February 2019 Estimate										
PMB	3,391,477	391,653	471,323	504,826	485,028	470,649	2,323,478	718,828	6,433,782	6,433,782
MR	0	0	0	0	0	0	0	63,278	63,278	63,278
Fee	155,504	14,325	14,501	27,804	10,612	18,860	86,101	0	241,605	241,605
Total	***3,546,981***	***405,978***	***485,824***	***532,630***	***495,639***	***489,509***	***2,409,579***	***782,106***	***6,738,666***	***6,738,666***
March 2019 Change										
PMB										
Change to PMB	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***-168,698***	***-168,698***	***-168,698***
MR										
Change to MR	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Fee										
Change to Fee	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***13,165***	***13,165***	***13,165***
Total Change	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***-155,533***	***-155,533***	***-155,533***
March 2019 Estimate										
PMB	3,391,477	391,653	471,323	504,826	485,028	470,649	2,323,478	550,130	6,265,085	6,265,085
MR	0	0	0	0	0	0	0	63,278	63,278	63,278
Fee	155,504	14,325	14,501	27,804	10,612	18,860	86,101	13,165	254,770	254,770
Total	***3,546,981***	***405,978***	***485,824***	***532,630***	***495,639***	***489,509***	***2,409,579***	***626,573***	***6,583,133***	***6,583,133***

Changes to/Utilization of Management Reserve in March 2019

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	FY2019	Total
February 2019 MR Totals									
RL-0011	0	0	0	0	0	0	0	15,928	15,928
RL-0012	0	0	0	0	0	0	0	8,163	8,163
RL-0013	0	0	0	0	0	0	0	6,185	6,185
RL-0030	0	0	0	0	0	0	0	7,762	7,762
RL-0040	0	0	0	0	0	0	0	8,700	8,700
RL-0041	0	0	0	0	0	0	0	16,350	16,350
RL-0042	0	0	0	0	0	0	0	189	189
Total	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***63,278***	***63,278***
March 2019 MR Changes/Utilization									
RL-0011	0	0	0	0	0	0	0	0	0
RL-0012	0	0	0	0	0	0	0	0	0
RL-0013	0	0	0	0	0	0	0	0	0
RL-0030	0	0	0	0	0	0	0	0	0
RL-0040	0	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	0	0	0	0	0
RL-0042	0	0	0	0	0	0	0	0	0
Total	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
March 2019 MR Totals									
RL-0011	0	0	0	0	0	0	0	15,928	15,928
RL-0012	0	0	0	0	0	0	0	8,163	8,163
RL-0013	0	0	0	0	0	0	0	6,185	6,185
RL-0030	0	0	0	0	0	0	0	7,762	7,762
RL-0040	0	0	0	0	0	0	0	8,700	8,700
RL-0041	0	0	0	0	0	0	0	16,350	16,350
RL-0042	0	0	0	0	0	0	0	189	189
Total	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***63,278***	***63,278***

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 ($M) 10/1/2008 - 3/31/2019 Reporting Category			
	$ Value	%	Goal %
SB	$1,592.23	55.81%	49.3%
SDB	$290.28	10.17%	8.2%
SWOB	$291.63	10.22%	7.5%
HUB	$91.49	3.21%	2.2%
VOSB	$243.33	8.53%	3.5%
SDVO	$153.49	5.38%	1.3%
NAB	$82.10	2.88%	N/A
Large	$759.53	26.62%	N/A
UNK	$0.02	0.00%	N/A
GOVT	$5.10	0.18%	N/A
GOVT CONT	$483.21	16.94%	N/A
EDUCATION	$0.17	0.01%	N/A
NONPROFIT_	$4.17	0.15%	N/A
FOREIGN	$8.48	0.30%	N/A
Total	$2,852.90	100.00%	N/A

PRC clause H.20b small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
CHPRC Contract Value:	$5,824.83
SB actual:	$1,592.23
SB Performed %:	27.34%

PRC clause H.20a max self performed requirement ≤ 65% of Contract Price Self Performed	
CHPRC Contract Value:	$5,824.83
CHPRC Self Performed:	$2,971.93
CHPRC Self Performed %:	54.99%

Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted more than $2.8 billion in goods and services, with more than 55 percent going to small businesses. All subcontracting goals have been exceeded.
2. Approximately 91 percent of the total dollars arise from service and staffing contracts and contract amendments, with six percent of the remaining expenditures arising from PCard purchases and three percent from the balance in purchase orders for materials and equipment.
3. Data is summarized by business categories (Women Owned Minority Business Enterprise codes) in accordance with socioeconomic reporting requirements. Small business categories overlap and should not be added together.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
CONTRACT			
J.12/C.2.2, C.2.3	PBS-11, Plutonium Finishing Plant Closure Project PBS-13, Solid and Liquid Waste Treatment and Disposal	Offsite Transportation of Radioactive Material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford Site and Perma-Fix Northwest locations. RL is the authorized shipper, acts as signatory on the shipping papers and ensures compliance with DOE Manual 460.2-1. RL arranges for Commercial Motor Vehicle Safety Alliance Level VI Vehicle Inspections and verifies that the government drivers meet the applicable Department of Transportation (DOT) Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or Transportation Safety Document requirements.	Ongoing.
J.12/C.2.3.6	PBS-13, Transuranic Waste Certification	Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico: 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.	No WIPP shipments are planned within the remaining contract period of performance.

DOE ACTIONS/DECISIONS

Refer to Sections A through G, as well as Appendix C, of this report for the project specific DOE Actions/Decisions.

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

CH2MHILL
Plateau Remediation Company

J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Load out of existing 234-5Z Facility debris continued in March after a slow start due to continued harsh winter weather in the beginning of the month. This caused an additional two-week slip against the planned schedule. At month end, approximately 85 percent of the existing debris pile had been shipped to the Environmental Restoration Disposal Facility (ERDF) for disposal. The forecast for resumption of low-risk demolition was delayed from March to April due to the previously noted unplanned harsh winter weather. Planning continued for the higher-risk demolition forecasted to begin in July 2019. Preparations for a planned April CH2M HILL Plateau Remediation Company (CHPRC) Management Assessment (MA) of the project's readiness to re-start higher-risk demolition continued.

Key Metrics

Key Performance Indicators	*Current Month*	*Contract To Date*
COMPLETE Glovebox/Hood Removed or Dispositioned in Place	0	232 gloveboxes/hoods
COMPLETE KPP Rooms/Areas Ready for Demo	0	72 rooms/areas
COMPLETE Asbestos/Asbestos Containing Material (ACM) Removed	0	35,827
COMPLETE Process Vacuum Piping Dispositioned	0	7,231 feet
COMPLETE Process Transfer Line Dispositioned	0	1,525 feet
COMPLETE Pencil Tank Units Removed (Shipped)	0	196 pencil tank units
COMPLETE Buildings Ready for Demo	0	68 structures
Buildings Demolished or Removed	0	63 structures
Non-radioactive Waste Shipped	0	89.8 m^3
Transuranic/Transuranic Mixed (TRU/TRU-M) Shipped	0	5,014 m^3
LLW/MLLW Shipped	56 m^3	18,087 m^3

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
19-EMS-PFP-OBJI-P1	Improve compliance, Environmental Management System (EMS) awareness, employee involvement	Four EMS presentations at minimum; involve one to two employees in compliance review, and facility walk-downs	9/30/19	60%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	1	47	3/17/2019 – An employee reported discomfort (cramp/sensitivity) on the bottom of their left foot, rib pain, and a shooting left leg pain with sensitivity to touch after performing activities involving multiple entries/egresses from an all-terrain vehicle and reaching up to perform radiological surveys on equipment while wearing a powered air purifying respirator. A doctor with Physicians Immediate Care in Richland evaluated the areas of concern, and the employee was diagnosed with a pinched nerve or inflammation of the nerve in their lumbar spine. (25112)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments:

- Completed and received approval from the independent Hazard Review Board (HRB) of the higher-risk 236-Z demolition package.
- Shipped eight containers of demolition debris to ERDF and loaded an additional 10 containers for shipment.
- Continued preparations for a CHPRC MA of the readiness to restart the higher-risk demolition in July 2019.

PTS Support:

- Conducted numerous Plutonium Finishing Plant (PFP) Operation tabletop drills to familiarize and test new hire Decontamination & Decommissioning (D&D) worker responses to changing radiological conditions. These tabletop drills provide the opportunity for the workers to develop a better grasp on expectations and practice responses to upset conditions.

MAJOR ISSUES

Issue:
The PFP project has realized a loss of approximately 30 D&D workers due to opportunities provided by the Labor Asset Management Program offering Nuclear Chemical Operator (NCO) positions across the Hanford site. Ten of the D&D workers transferred to Washington River Protection Solutions, LLC (WRPS) in December, 10 in January, and eight in March. The loss of trained and qualified workers caused a schedule loss of 10 weeks to the PFP project.

Corrective Action:
Work with Labor Relations and Human Resources to fill needed positions.

Status:
In response to the loss of staff and possible additional attrition, PFP has hired 41 D&D workers who will complete classroom training at Volpentest HAMMER Federal Training Center in north Richland with field mentoring training activities to follow. The first group of 31 D&D workers began training on December 3, 2018, and completed field mentoring training activities January 24, 2019. The second group of 10 D&D workers began training on January 28, 2019, and will finish field mentoring training activities March 28, 2019. To prepare new hire D&D workers for safe work activities at PFP, experienced workers and managers have been dedicated to bring new staff up to speed to resume demolition and debris load out. Furthermore, an additional eight postings are expected to occur in the future. With the completion of training for the second set of new workers, this issue will be closed.

Issue:
The project lacks adequate Radiological Control Technicians (RCTs) to complete work package development, mockups, and fieldwork activities. Efforts to employ adequate RCTs, via contract or otherwise, have been exhausted. The project has not realized planned staffing support for ongoing activities at PFP.

Corrective Action:
CHPRC has teamed with WRPS to hire and train RCTs to fulfill site wide resource needs.

Status:
The teaming companies have performed initial screening/aptitude testing of applicants. Development of the RCT training course has been completed and selected candidates began training on March 11, 2019. Allocation of RCT resources is subject to the availability and needs of the company at the time of training completion, later this summer. Based on the start of training, this issue is considered closed.

Issue:
Harsh weather has impacted PFP's ability to complete scheduled debris disposition activities. Additionally, in February, there were a significant number of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities, where non-essential personnel were directed not to report to work.

Corrective Action:
The project has set up an acount to collect weather impacts and will pursue a baseline change request (BCR) to drawdown RL contingency to address the realization of this risk.

Status:
Work crews normally supporting decontamination and demolition activities were reassigned to snow removal and weather mitigation activities. Demolition activities will resume after conditions improve. Better weather in March allowed resumption of debris disposition, and a BCR to be processed in April will close this issue.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011/WBS-011.OA				
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
PFP-P2-002: Weather Impacts During 235-Z Debris Disposition	Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will result in in-scope unplanned work and schedule impacts to the project. **Risk Handling Strategy:** Control **Probability:** Very Likely (>90%) **Worst Case Impacts:** $0, 8 days			**Risk Event:** In February, there were a significant number of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities, where non-essential personnel were directed not to report to work **Risk recovery action(s)** / **FC Date** / **%** Plan for 80% total operation efficiency / Ongoing / N/A **Risk Action Assessment:** Work crews normally supporting demolition and demolition support activities have been reassigned to snow removal and weather mitigation activities. Demolition preparation activities resumed in March after conditions improved. A BCR will be implemented in April to account for the impacts of weather delays on the project schedule.
PFP-P-014: Bump and Roll, Labor Assets Management Program (LAMP), or Other Contractor Hiring of Bargaining Unit Employees Affecting Productivity	Plutonium Finishing Plant (PFP) Hanford Atomic Metal Trades Council (HAMTC) labor resources are unavailable or unqualified due to the bump and roll, LAMP, or other job postings, resulting in schedule impacts to the project. **Risk Handling Strategy:** Control **Probability:** Likely (75% to 90%) **Worst Case Impacts:** $0, 128 days			**Risk Event:** Thirty D&D workers have been hired by other projects on the Hanford Site and have left PFP. The process to hire and train new D&D workers has been initiated. **Risk recovery action(s)** / **FC Date** / **%** Communication and coordination with other projects, contractors, and unions to reduce or eliminate the impact of the bump and roll process. / Ongoing / N/A Hire and train additional D&D workers as needed to perform demolition work at PFP. (Group 1) / 1/24/19 / 100% Hire and train additional D&D workers as needed to perform demolition work at PFP. (Group 2) / 3/28/19 / 95% **Risk Action Assessment:** The first group of 31 new D&D workers completed training/field mentoring activities January 24, 2019. The second group of 10 new D&D workers started training January 28, 2019, and will complete field mentoring activities March 28, 2019. An additional week is needed to complete training/mentoring due to weather delays in February and March. A BCR will be implemented in April to account for the impacts of D&D worker loss delays on the project schedule.
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high-risk threat value risks in March.				

FY2019 Risk Triggers (Risk could be realized in FY2019)

PFP-P-004: Stop Work From Concerned Workers	Concerned workers result in a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project. **Risk Handling Strategy:** Accept **Probability:** Very Likely (>90%) **Worst Case Impacts:** $0, 52 days			**Risk Event:** During resumption of PFP demolition activities, an increase in stop works could result in delays. **Mitigation action(s)** / **FC Date** / **%** Update communications as positions change. / Ongoing / N/A Provide new maps, with entry/exit instructions when boundaries are revised. / Ongoing / N/A Encourage additional worker involvement. / Ongoing / N/A Increase frequency of post-job reviews. / Ongoing / N/A **Mitigation Assessment:** No major changes in March. Though increased communication and worker involvement to avoid confusion and concern in an effort to minimize stop works has continued; stop works may impact the project schedule going forward. A BCR will be implemented in April to account for the impacts of stop work delays from July 2018 to November 2018.
PFP-P-007: Demolition Equipment Reliability and Modification	Ineffective demolition equipment attachments, mechanical failures, or contamination of clean equipment impact the demolition of PFP. Equipment modification, leasing, or replacement will be required, resulting in cost and schedule impacts. **Risk Handling Strategy:** Control **Probability:** Low (10% to 25%) **Worst Case Impacts:** $1 million, 48 days			**Risk Trigger:** Equipment failures result in delays to fieldwork. **Mitigation action(s)** / **FC Date** / **%** Repurpose other owned equipment on-site. / Ongoing / N/A Develop and maintain min/max inventory of spares. / Complete / 100% Perform planned preventative maintenance on equipment. / Ongoing / N/A **Mitigation Assessment:** No major changes in March. All mitigations have been sufficient to maintain equipment in working condition.
PFP-P5-006: Additional Soil Removal is Required	Prior to the placement of the cover cap, the additional soil added for contamination control is required to be dispositioned, resulting in cost and schedule delays to the project. **Risk Handling Strategy:** Control **Probability:** Low (10% to 25%) **Worst Case Impacts:** $0, 54 days			**Risk Trigger:** Additional soil, above planned value, is required to be removed due to contamination or regulatory concerns. **Mitigation action(s)** / **FC Date** / **%** Engage early with RL to identify a path forward associated with the additional soil. / 11/9/18 / 100% Collect and provide radiological mapping data to RL. / TBD / TBD **Mitigation Assessment:** No major changes in March. There has been continued communication with RL on required soil removal. No additional soil above planned quantity is required at this time. RL has requested radiological data to help them determine no additional soil disposition than planned is required.

Unassigned Risks (Pending ownership of identified risks/opportunities)

No unassigned risks identified in March.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0011/WBS-011.OA</td></tr>
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Risk Handling Strategy: Control

Probability: Very Likely (>90%)
Worst Case Impacts: $0, 8 days</td><td>  </td><td>  </td><td>Risk Event: In February, there were a significant number of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities, where non-essential personnel were directed not to report to work

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Unassigned Risks (Pending ownership of identified risks/opportunities)				
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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	56.5	51.9	4.4	(4.6)	-8.2%	47.5	91.6%

Numbers are rounded to the nearest $0.1 million.

Current Month (CM) Schedule Variance: (-$4.6M/-8.2%)

The CM unfavorable schedule variance is primarily attributed to delays in resuming debris disposition and restarting low- and high-risk demolition. The project baseline assumes high risk demolition for 235-Z Facility would be complete in March. However, due to impacts from stop works, the loss of the D&D crews to other Hanford contractor hiring actions, and impacts from adverse weather in February and early

March, the project has not yet completed debris disposition. These impacts are unrecoverable. A BCR is planned for April 2019 to draw down RL contingency to address impacts to the project breakdown structure (PBS) RL-0011 C.2 Project to complete project performance measurement baseline to address above noted impacts to enable effective performance reporting on the balance of the project work.

CM Cost Variance: (+$47.5M/+91.6%)

The CM favorable cost variance is primarily attributed to the implementation of BCR-PRC-19-012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the performance measurement baseline (PMB) from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REA), through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019. The BCR incorporated the negotiated budget values for REAs 1661, 1665, 1666, 1671, 1672, 1675, 1677, and 1678. Implementation of this BCR required a one-time adjustment to this control account to reflect the agreed values of the identified REAs whose costs were incurred in prior periods.

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)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,081.3	1,057.9	1,169.5	(23.4)	-2.2%	(111.7)	-10.6%	1,101.6	1,217.2	47.7	(115.6)
	Numbers are rounded to the nearest $0.1 million										

Contract-to-Date (CTD) Schedule Variance: (-$23.4M/-2.2%)

The CTD schedule variance is within threshold.

CTD Cost Variance: (-$111.7M/-10.6%)

The negative CTD cost variance is primarily a result of unplanned costs to support implementation of schedule efficiency initiatives at PFP (i.e., foaming, Perma-Fix Northwest [PFNW] size reduction support, implementation of the PremAire Breathing System); increased training costs of additional RCTs and D&D workers assigned to PFP; additional resources to recover schedule from asbestos removal activities and to support the unplanned asbestos identified for removal (about 10,000 feet); unplanned shipping materials (waste shipping containers TL-1800s, SLB2s, IP-1 bags, etc.) required to support waste load out activities for TRU waste disposition efforts; and unplanned work to reconfigure the high-density polyethylene (HDPE) water loop to support the new radiological boundaries also contributed to this variance.

Contributors to the negative cost variance include resumption actions associated with the December 2017 contamination event: fixative applications, performance of radiological surveys, revising radiological postings, infrastructure modifications, and stabilization activities. Reassignment of CHPRC personnel to support the radiological control area and programmatic assessments also contributed to the variance.

After resumption activities were completed, slower progress on size reduction and waste load out has increased the variance. Process improvements, planning, and training activities to replenish D&D and RCT staffing support has resulted in increased costs with less than optimal project performance.

The negative cost variance is partially offset by using fewer breathing air suits (three suites per day versus five) and fewer hoses than originally planned for 242-Z entries. This is a result of fewer fieldwork team members being required to perform hands-on work in 242-Z due to the confined space. In addition, there were recognized efficiencies where crews were able to complete process vacuum removal in 291-Z with less effort than originally planned. Characterization results indicated lower levels of hold-up than planned, which allowed more efficient piping removal. Isolations of the 291-Z Facility were performed more efficiently than planned due to the main electrical power being disconnected outside of the building rather than performing individual isolations within the facility. Hazardous material removal, stabilization, and decontamination were more efficient than originally planned (i.e., using powerful fans to assist with vertical fixative flow up the stack).

Implementation of a BCR was processed in September 2017 to draw down RL contingency to address impacts to the PBS RL-0011 C.2 project costs associated with realized RL risks, which also partially offset the variance. Areas impacted were associated with weather delays, stop works, contamination events, and Mission Support Alliance, LLC (MSA) resources retained to prevent bump and roll impacts. Recognition of efficiencies associated with demolition of 242-Z, 291-Z, and 234-5ZA are also contributing to the offset of the negative variance.

Another offset to the negative CTD variance is the implementation of BCR-PRC-19-012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the Performance Measurement Baseline (PMB) from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REA), through September 30, 2018. The BCR incorporated the negotiated budget values for REAs 1661, 1665, 1666, 1671, 1672, 1675, 1677, and 1678.

Variance at Completion (VAC): (-$115.6M/-10.5%)
The unfavorable VAC is reflective of extended hotel load and field resource costs due to delays in demo-ready and demolition activities.

As a result of wall removals and electrical isolations, approximately 10,000 additional feet of asbestos was discovered between the walls that required removal. CHPRC is working with RL to use contingency for the additional 10,000 feet of identified asbestos, impacts from the criticality alarm, and relief from the 30 days of weather delays experienced from December 2016 through March 2017.

Overtime was used to ready the 234-5Z Facility for demolition by September 2017. In addition, unplanned work on the HDPE water loop contributed to this variance. This unfavorable variance is partially offset by recognized efficiencies due to characterization data in the 234-5Z duct level, allowing piping and ducting to be left in place for demolition, and the 291-Z demolition activities.

After a stop work was called due to the December 2017 contamination event, the estimate at completion (EAC) and VAC was adjusted to reflect the projected date to reach slab-on-grade in October 2019. The EAC is reflective of resumption activities, impacts of craft personnel awarded positions to WRPS, and revised demolition approach implementation.

In February 2019, BCR-011C-18-005R2 implemented the RL-approved revised scope, cost, and schedule baseline for the completion of the RL-0011.C2 project. The BCR set the remaining historical budgeted cost of work scheduled equal to budgeted cost of work performed as of June 24, 2018, consistent with DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets, and DOE approving authorities' determination to establish a new performance baseline as documented by 18-AMRP-0062, dated February 27, 2018, Performance Baseline Deviation Notification of Plutonium Finishing Plant (PFP) Demolition Project – RL-0011.C2.

In March 2019, BCR-PRC-19-012R0 implemented the Global Settlement, which incorporated the impacts to the PMB from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and REAs, through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

	FY2019		
WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	**Projected Funding**	**Spending Forecast**	**Variance**
Spending Forecast	70.0	64.2	5.8
RL-0011 - Total	70.0	64.2	5.8
Numbers are rounded to the nearest $0.1 million			

Funds/Variance Analysis
Fiscal year (FY) 2019 spending forecast for PBS RL-0011 is $64.2 million for continuation of demolition activities to achieve slab-on-grade. Projected funding is $70.0 million.

Critical Path Schedule
The PFP critical path schedule begins with debris disposition of the 234-5Z rubble piles starting with the front side waste. Once the waste debris is loaded out, demolition will resume on the remaining sections of Zones 2 and 7, with the exception of the drain line. Remote Mechanical C process line demolition, Remote Mechanical A process line demolition, and load out of glovebox HA-46, in parallel with completion of the basement of 234-5Z demolition, will begin after a second MA and concurrence is obtained to resume high-risk demo from RL. The 234-5Z demolition is projected to complete August 26, 2019. The 236-Z canyon demolition will then resume with completion scheduled for October 24, 2019, meeting the requirements for the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-083-00A – PFP Facility Transition and Selection Disposition Activities. Completion of demolition is followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities completing in early February 2020.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0011 Tri-Party Agreement enforceable milestones, non-enforceable target due dates, and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PFP Facility Transition and Selection Disposition Activities	9/30/2017		10/24/2019	Transition and disposition activities slipped 14 days as a result of additional weather delays. Approximately 85 percent of the total debris pile have been shipped to ERDF for disposal.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
CONTRACT			
J.12/C.2.2, C.2.3	PBS RL-0011, PFP Closure Project	Offsite transportation of radioactive material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford Site and PFNW locations. RL is the authorized shipper and acts as signatory on the shipping papers, and ensures compliance with DOE Manual 460.2-1. RL arranges for Commercial Motor Vehicle Safety Alliance Level VI vehicle inspections and verifies that the government drivers meet the applicable Department of Transportation (DOT) Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or transportation safety document requirements.	Ongoing

DOE ACTIONS / DECISIONS

DOE activities supporting approval for ancillary facility status change forms were in progress.

Section B
Spent Nuclear Fuel Stabilization and Disposition (RL-0012)

CH2MHILL
Plateau Remediation Company

R. M. Geimer
Vice President for
K Basin Operations

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The tenth Sludge Transport & Storage Container (STSC) filled with sludge from 105KW fuel storage basin was shipped to T Plant on March 18, 2019. STSC 11 is forecasted to be shipped to T Plant on April 10, 2019.

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	3	21	3/12/2019 – Employee was exiting a tractor and rolled ankle. Evaluated at HPMC and returned to work without restriction. (25102) 3/14/2019 – Employee caught foot on edge of gap, causing fall, hurting back. Evaluated at HPMC and returned to work without restriction. (25107) 3/15/2019 – Employee was handling bags of powered air purifying respirators when shoulder became sore. Evaluated at HPMC and returned to work without restriction. (25108)
Near Misses	0	1	N/A

KEY ACCOMPLISHMENTS

100K Operations

- The 100K Area operations group maintained facilities in a safe and compliant condition. Crews continue to sort, characterize, and relocate/containerize the high-dose sludge material in the center bay.

KW Basin Sludge Removal

- The 100K operations support team performed preventive maintenance and calibrations on both Engineered Container Retrieval and Transfer System (ECRTS) components and annex utility system components.

- The tenth STSC was filled with sludge from the 105KW fuel storage basin and was shipped to T Plant on March 18, 2019 for placement into interim storage.
- The 105KW baseline Documented Safety Analysis (DSA) Annual Update was approved on March 6, 2019 by RL.

MAJOR ISSUES

Issue:
Discovered sludge densities may require procurement/processing/storage of additional STSCs beyond the baseline assumption of 22.

Engineered container sludge mass is likely greater than assumed in the baseline. The material-balance calculations completed to forecast the total number of STSCs required to execute the Sludge Removal Project (SRP) may have used sludge density values that do not accurately characterize the sludge stored in the 105KW engineered containers (ECs). If the actual sludge mass in the ECs (mass = density x volume = ρ*V) is greater than the mass currently projected in source documents, additional STSCs may be required to remove and store the remaining sludge.

Corrective Action:
Video inspections to estimate current volumes of each of the sludge ECs has been completed. Engineering personnel will complete evaluation of settled density values in EC-250, KE sludge, and make final recommendations on the estimated number of STSCs to complete the sludge campaign.

Status:
100K engineering personnel believe the average archived sample density established in PNNL-27704 for sludge material removed from each of the ECs is likely a more accurate representation of existing EC sludge density (rather than the density values produced 24 hours after sample settling). Applying the more conservative settled density values indicates that the existing material will require between 24 to 26 STSCs, rather than the 22 STSCs currently planned. 100K Engineering estimates from STSC 9 continues to calculate the total number of STSCs required at 24. Engineering is currently preparing a white paper to document a more accurate forecast of the total number of STSCs required to complete the sludge removal campaign. In anticipation of potentially needing to procure additional vessels, the project is analyzing available options to fund a potential procurement.

Issue:
Attrition of qualified personnel. Since the initiation of sludge removal activities in June 2018, there has been greater than 25 percent attrition of Nuclear Chemical Operators (NCOs) and Radiation Control Technicians (RCTs) who have either left the organization or are on short-term disability. The loss of qualified personnel may potentially impact achieving sludge removal schedule goals.

Corrective Action:
Additional RCTs and NCOs have been hired to backfill vacant positions. Personnel are being trained and qualified prior to deployment.

Status:
Although there are currently sufficient NCOs/RCTs to support dayshift 105KW Basin and ECRTS operations, the attrition over the last six months has been significant. Additional RCTs and NCOs have been hired and are in the training/qualification process. The majority of the NCOs and RCTs will be qualified by mid-April with one more NCO completing the qualification process by mid-May. While several exempt employees have left the project in the last six months, replacements for exempt employees are more readily available and deployable.

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

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0012/WBS-012				
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
STP-152: Attrition, Acquisition, & Retention of Qualified Employees	Improving job markets/funding uncertainties or sitewide priorities results in competition for key resources, resulting in schedule delays to the project. Additionally, higher-than-anticipated attrition impacts project baseline costs. **Risk Handling Strategy:** Control **Probability:** Medium (26% to 74%) **Worst Case Impacts:** $500K, 36 days			**Risk Event:** Due to the current job market, K Basin Operations (KBO) personnel have elected to leave the project to pursue other opportunities. **Risk Recovery action(s)** / **FC Date** / **%** Monitor employee job satisfaction to evaluate/maintain morale. / Ongoing / N/A Actively pursue filling open positions and train/qualify personnel. / 5/31/19 / 90 Establish enhanced work schedule. (KWD7442) / Complete / 100 **Risk Action Assessment:** Since the initiation of sludge removal activities in June 2018, there has been greater than 25 percent attrition of qualified NCOs and RCTs. The loss of qualified personnel has negatively impacted achieving sludge removal schedule goals. Both operations and radiation protection management have backfilled open positions. Both organizations were expecting to have fully trained and qualified staff to support an enhanced work shift by February 19, 2019, but due to Maintenance and Storage Facility (MASF) work outages and sitewide weather impacts, the availability of trained personnel is delayed Qualified staff is being provided intermittently as they become available. The project has crews committed to work 5-day work weeks covering Fridays on overtime.
STP-153: Sludge Engineered Container End Point Criteria	ECF-100KR2-12-0040 Calculation for 105-KW Substructure Demolition Rubble Environmental Restoration Disposal Facility Compliance specifies the volume of residual sludge that is acceptable to leave in ECs following sludge removal operations. It is possible that the end point criteria cannot be achieved without extensive cost and schedule implications. **Risk Handling Strategy:** Control **Probability:** Medium (26% to 74%) **Worst Case Impacts:** $200K, 64 days			**Risk Triggers:** During execution of the sludge removal campaign, personnel have come to understand that standard methods of sludge removal are not able to efficiently achieve EC Sludge end point criteria. **Risk Recovery action(s)** / **FC Date** / **%** Perform periodic video camera inspections throughout sludge removal campaign to plan retrieval strategies. / Ongoing / N/A Develop and submit DSA/TSR revisions that facilitate layering KW sludge (SCS-CON-210/220) with KE sludge (SCS-CON-240/250/260). / Complete / 100 Remove EC-210 lid to facilitate characterization and sampling. (KWD8955) / Complete / 100 Consider sampling heals in ECs to facilitate achieving end point criteria using more accurate source term. / 6/30/19 / 5 Use EC-250 as proof of process to ensure end point criteria can be achieved. / 3/31/19 / 95 **Mitigation Assessment:** A work package was executed to remove the EC-210 lid to facilitate characterization and/or sampling of the heel. This information confirmed that a substantial portion of the remaining 76 gallons must be retrieved to achieve end point in that EC. In parallel, engineering and nuclear safety personnel have prepared a safety document revision that will facilitate layering EC-210/220 sludge with KE sludge. This safety document revision is approved and is in the process of being implemented. The sludge volume in EC-250 is nearing the volume required to achieve end point criteria. Operations removed the lid before STSC-11 initiated transfer activities to allow full access to the remaining material. This was done to facilitate achievement of end point criteria as proof of process going forward.

<table>
<tr><th></th><th>Unmitigated Risk Impacts</th><th colspan="2">Assessment
Month | Trend</th><th>Comments</th></tr>
<tr><td colspan="5">RL-0012/WBS-012</td></tr>
<tr><td>STP-156: Sludge Removal Campaign Impacted by Variations in Engineered Container Sludge Density/Volume</td><td>The actual mass of sludge stored in the 105KW Basin ECs is not consistent with the mass assumed in the SRP Technical Basis, resulting in cost and schedule delays.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $1,600K, 48 days</td><td>  </td><td>  </td><td>Risk Triggers: The actual sludge mass in the ECs (mass = density x volume = ρ*V) is greater than the mass currently projected in source documents, resulting in the need for additional STSCs to remove and store the remaining sludge.

<table><tr><th>Risk Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Complete visual inspections of sludge stored in ECs SCS-CON-210/220/230 (at a minimum) to assess volume information specified in technical basis documents.</td><td>Complete</td><td>100</td></tr><tr><td>Evaluate and implement feasible opportunities to more efficiently disposition remaining EC sludge. (KWD7442)</td><td>Complete</td><td>100</td></tr><tr><td>Complete bulk sludge removal from EC-250, which will facilitate establishment of KE Basin sludge density. (KWD6580)</td><td>Complete</td><td>100</td></tr><tr><td>Revisit Sludge Removal Project Basis Document HNF-SD-SNF-TI-015 R28, Spent Nuclear Fuel Project Technical Databook, Volume 2, Sludge, and HNF-41051 R13, STP Container and Settler Sludge Process Description and Material Balance based upon PNNL-27769, STP K Basin Sludge Sample Archive Status FY2018. Determine if document revisions are required to complete sludge removal campaign. (KWD9010)</td><td>4/18/19</td><td>95</td></tr><tr><td>Issue Final Sludge Density Evaluation, establishing total number of STSC necessary to complete sludge removal.(KWD9010)</td><td>4/18/19</td><td>90</td></tr></table>
Mitigation Assessment: Engineering personnel are reviewing SRP basis documents to determine how the baseline project assumptions were impacted by sludge density assumptions. After the final review of the documents and completion of visual inspections of sludge currently stored in ECs SCS-CON-210/220/230, set points were evaluated in February and it was determined that the set points for current loading will not change, however, the blending of EC-210/220 with EC-240/250/260 sludge is being added to the baseline document. The final evaluation will occur upon completion of sludge removal from EC-250, which was completed in late-March 2019. The data book and other baseline documents will need to be updated for any additional sludge material that is added to the engineered containers.</td></tr>
<tr><td>STP-156-C: Sludge Removal Campaign Extended Due to Discovery of High Dose Material</td><td>Additional high-dose “sludge-like” material is discovered on the 105KW Basin floor during 100K Closure Project characterization activities that is best dispositioned with the EC sludge waste stream. Adding this additional “sludge-like” material to the SRP campaign negatively impacts existing SRP cost and/or the schedule baseline.

Risk Handling Strategy: Accept

Probability: Very Likely (>90%)
Worst Case Impacts: $500K, 24 days</td><td>  </td><td>  </td><td>Risk Triggers: Additional sludge may be discovered that must be put into ECs and processed with the balance of the EC sludge as 100K Closure Project personnel conduct characterization efforts in the 105KW Basin.

<table><tr><th>Risk Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Continue to monitor conditions identified by the baseline characterization efforts.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Collect and quantify the volume and weight of the high-dose material in the 105 KW Basin. (KWD90111)</td><td>Complete</td><td>100</td></tr><tr><td>Update Sludge Campaign Documentation to disposition recently discovered high-dose material. (KWD90276)</td><td>4/15/19</td><td>60</td></tr></table>
Mitigation Assessment: During March, 100K Closure personnel continued development of documentation and work package that will be required to allow (double barrel fuel canister) high-dose material to be placed into EC-230 and removed from the 105KW Basin via STSCs.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td colspan="5">No critical risks identified in March.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td colspan="5">No high threat value risks identified in March.</td></tr>
<tr><td colspan="5">FY2019 Risk Triggers (Risk could be realized in FY2019)</td></tr>
</table>

<table>
<tr><th></th><th>Unmitigated Risk Impacts</th><th colspan="2">Assessment
Month | Trend</th><th>Comments</th></tr>
<tr><td colspan="5">RL-0012/WBS-012</td></tr>
<tr><td>STP-073-C: Processing Efficiency - Retrieval & Shipping</td><td>The realized processing efficiency associated with sludge retrieval and shipping operations does not match the baseline plan.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $0K, 54 days</td><td>  </td><td>  </td><td>Risk Triggers: Actual processing efficiency associated with sludge retrieval and shipping operations does not match baseline assumptions. This risk will continue in FY2019 during operations campaign.

<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Establish a production control center to facilitate maximum efficiency integrating SRP operations and maintenance activities.</td><td>Complete</td><td>100</td></tr><tr><td>Review operations and maintenance activities required to produce each sludge STSC and establish a “typical” schedule integrating all activities in the most efficient sequence possible.</td><td>Complete</td><td>100</td></tr><tr><td>Revise plan to establish the appropriate campaign schedule.</td><td>Complete</td><td>100</td></tr></table>
Mitigation Assessment: No major changes in March. Project personnel completed a revised plan to establish the appropriate campaign schedule, taking into account ion exchange module (IXM) change outs and performance of preventive maintenance activities. The revised plan has been provided to RL via the FY2019 Post Contract Baseline submittal, and RL is currently reviewing this plan. Additionally, KBO put the sludge removal campaign personnel on a five-day work week (minimum), effective February 2019. The team has recently initiated transfers from EC260, and the material handling is different from previous ECs. The team will continue to monitor the efficiency associated with the sludge retrieval process.</td></tr>
<tr><td>STP-108: STP Annex Equipment and ECRTS/Ancillary System Reliability</td><td>Required corrective maintenance on the STP annex and the ECRTS equipment is higher than planned due to one-of-a-kind system design or sludge characteristics, resulting in cost and schedule impacts.

Risk Handling Strategy: Control

Probability: Low (10% to 25%)
Worst Case Impacts: $400K, 66 days</td><td>  </td><td>  </td><td>Risk Triggers: Required corrective maintenance on the SRP and ancillary equipment is higher than planned.

<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Conduct full-scale testing at the MASF to determine baseline for CM and PM program.</td><td>Complete</td><td>100</td></tr><tr><td>The project will provide spare parts for critical or long-lead components.</td><td>Complete</td><td>100</td></tr><tr><td>Develop PM activities prior to construction completion to optimize maintenance costs.</td><td>Complete</td><td>100</td></tr><tr><td>Perform reliability, availability, and maintainability analysis.</td><td>Complete</td><td>100</td></tr><tr><td>Modifications to the skimmer pump and IXM pump to accommodate an alternative IXM water source. (KWD90091)</td><td>4/30/19</td><td>60</td></tr></table>
Mitigation Assessment: No major changes in March. Due to IXM system challenges (potential unavailability), an alternate water supply modification has been generated and hardware procured. Plans are to install this modification in the future to mitigate unavailability of IXM system impact on sludge removal.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified threats/opportunities)</td></tr>
<tr><td colspan="5">No unassigned risks identified in March.</td></tr>
</table>

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	0.7	0.7	1.4	0.1	8.6%	(0.7)	-99.8%

Numbers are rounded to the nearest $0.1 million

CM Schedule Performance (+$0.1M/+8.6%)
The variance is within reporting thresholds.

CM Cost Performance (-$0.7M/-99.8%)
The current month negative cost variance resulted from the March 2019 implementation of BCR PRC 19 012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the performance measurement baseline (PMB) from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REAs), through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019. Implementation of this baseline change request (BCR) resulted in a one-time adjustment to the current period budget for work planned in prior years to reflect the agreed values of the scope. This adjustment caused negative current period budgeted cost of work scheduled with corresponding negative current period of budgeted cost of work performed.

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)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	751.5	750.5	721.3	(0.9)	-0.1%	29.2	3.9%	761.1	730.6	9.3	30.5

Numbers are rounded to the nearest $0.1 million

CTD Schedule Performance (-$0.9M/-0.1%)
The variance is within reporting thresholds.

CTD Cost Performance (+$29.2M/+3.9%)
The variance is within reporting thresholds.

Variance at Completion (+$30.5M/+4.0%)
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	FY2019 Projected Funding	FY2019 Spending Forecast	FY2019 Variance
Expense – Spending Forecast	20.1	17.7	2.5
Incremental Scope Pending Change Management	0.0	0.0	0.0
Expense – Subtotal	20.1	17.7	2.5
Line Item (LI)	11.3	0.0	11.3
Incremental Scope Pending Change Management	0.0	0.0	0.0
LI – Subtotal	11.3	0.0	11.3
RL-0012 – Total	31.4	17.7	13.8

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis
FY2019 funding for project breakdown structure (PBS) RL-0012 is $31.4 million. FY2019 funding aligns with the RL Integrated Priority List. The variance primarily reflects funding for line item work scope that was completed in FY2018.

Critical Path Schedule
The project critical path schedule runs through completion of retrieval operations, including the filling of STSCs with sludge, transporting to T Plant, and placement in the T Plant cell. The project is on schedule to complete Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-016-176, Complete Sludge Removal from 105KW Fuels Storage Basin, ahead of the December 31, 2019, due date.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0012 Tri-Party Agreement enforceable milestones, non-enforceable target due dates, and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-176	Complete Sludge Removal	12/31/2019		9/25/2019	On Schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
Approval of DSA Annual Update	1/7/2019 (A)	3/1/2019(A)

Section C
Solid Waste Stabilization and Disposition (RL-0013)

CH2MHILL
Plateau Remediation Company

K. R. Shupe
Vice President for
Waste and Fuels Management
Project

T. L. Hobbes
Vice President for
River Risk Management Project

M. A. Wright
Vice President for Project
Technical Services

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

During the March reporting period, February 25 - March 24, 2019, Waste and Fuels Management Project (W&FMP) maintained facilities in a safe and compliant condition. The River Risk Management Project (RRMP) operated the Environmental Restoration Disposal Facility (ERDF) and continued document preparation for the Integrated Disposal Facility (IDF) permits.

This month:

- The Management of Cesium and Strontium Capsules (W-135) Project final design for Waste Encapsulation and Storage Facility (WESF) modifications was submitted to CHPRC by the design subcontractor on March 5, 2019. A kickoff meeting for the CHPRC design review was held on March 6, 2019. CHPRC completed verification of the incorporation of comments into the final design media for cask storage system (CSS). Mobilization was completed and pothole excavation initiated on March 18, 2019, for the capsule storage area (CSA) utility verification. The test pits are required to determine the integrity and location of existing firewater pipelines and to provide the opportunity to field verify drawing information at the planned points of tie-in (pipe material, size and condition). A final design review was initiated on March 20, 2019, for the Maintenance and Storage Facility (MASF) mockup facility. The mockup facility will simulate the G Cell, canyon and truck port and will also be utilized to test equipment, develop procedures, and train personnel.
- The T Plant sludge receipt team continues to receive sludge transport and storage containers (STSC) from the 100K West Reactor Basin for interim storage at T Plant. STSC 9 was received on February 25, 2019, and STSC 10 was received on March 16, 2019. To date, three STSCs have been received and placed in cell 10L, six STSCs in cell 15L, and one in cell 14R.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
19-EMS-WFMP-OBJ1-P1	Receive 10 STSC sludge shipments at T Plant.	T Plant Complex will receive 10 STSC sludge shipments.	9/30/2019	70%
19-EMS-WFMP-OBJ2-P1	Complete and issue the Preoperational Environmental CSA	Perform sampling and analysis, if needed, as determined by DOE to support the preparation and issuance of the Preoperational Environmental Survey for the CSA. Complete and issue the Preoperational Environmental Survey Report for the CSA.	9/30/2019	100%
19-EMS-WFMP-OBJ3-P1	Complete the CSB Programmable Logic Controller (PLC) Upgrade Project to better avoid exceedance of the air operating permit limits.	Complete PLC Upgrade Project fieldwork. Complete the PLC Upgrade Project test report and final documentation.	9/30/2019	100%
19-ERDF-OBJ1-P1	Track maintenance recycling activities at ERDF.	Monitor and evaluate ERDF maintenance recycling activities for compliance with CHPRC procedures and complete annual review of recycling activities.	9/30/2019	56%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	0	22	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Waste and Fuels Management Project

13.01 Project Management

- W&FMP distributed the redline edits and comment responses for the CSA Part A, Security, Preparedness and Prevention addenda for the joint CHPRC and Department of Energy Richland Operations Office (RL) review.
- State of Washington Department of Ecology (Ecology) presented a final revised closure approach for the consent agreement/final order (CAFO) closure plans on February 25, 2019. RL determined Ecology should move forward with modification to the formally submitted CAFO closure plans to prepare them for the Ecology 45-day public comment period.

13.02 Capsule Storage & Disposition

- Completed two operational drills at WESF.
- Completed G Cell wall painting, stenciling of nozzle numbers, and electrical investigation fieldwork.
- Completed the replacement of truck port cover plate fabrication and transferred to the paint shop for painting in support of the activities to restore the use of the WESF crane.
- Completed the hot cell cover block lifting bail removal. This work is necessary to reveal a footprint in the canyon to retire the existing truck port cover block.
- Completed 39 preventative maintenance (PM) packages.

13.03 Canister Storage Building (CSB)

- Completed one operational drill and one emergency preparedness drill at CSB.
- Completed facility manager verification of documents for annual multi-canister over pack sampling proficiency demonstration.
- Supported Office of Enterprise Assessment (EA-1) visit and facilitated tour of CSB Operating Deck.
- Completed 30 PM packages.

13.06 Transuranic (TRU) Repackaging

- Completed repackaging of 73.12 cubic meters of transuranic mixed (TRUM) and Transuranic (TRU) waste in March, for a total of 197.62 cubic meters fiscal year to date (FYTD).

13.07 Waste Receiving and Processing (WRAP)

- Completed scheduled operations, RADCON inspections, safety inspections, and motor control center thermal scan inspection.
- Completed 231 surveillances and 10 PM packages.

13.08 T Plant

- Completed replacement of canyon cell cover blocks on cell 15L.
- Completed 517 surveillances and 29 PM packages.

Sludge Receipt

- Completed receipt of the ninth and tenth STSC shipment from 105KW to T Plant and placed them into interim storage in the T Plant Canyon.

13.09 Central Waste Complex (CWC) and Low-Level Burial Ground (LLBG)

- Completed demolition of 2120WA and 2120WB, and materials stored in tents were salvaged and provided to other projects and/or transferred to storage at CWC.
- Completed 269 surveillances and 13 PM packages.
- Received four standard waste boxes (SWBs) from Perma-Fix Northwest (PFNW) into CWC in one shipment.
- Shipped three 1800 Top Loads (TLs) and one Super7A from CWC into PFNW in three shipments.

13.15 TRU Disposition

- Continuing enhancement of acceptable knowledge on TRU-waste streams RLBAT-07 and RLPURX-01.

13.16 Offsite Spent Nuclear Fuel Disposition

- Maintained coordination of offsite spent nuclear fuel disposition.

13.21 Mixed Waste Disposal Trenches

- Completed 117 surveillances.
- Received five boxes and four SWBs from PFNW into Mixed Waste Trench 31 in two shipments.

13.24 Management of Cesium and Strontium Capsules Project

- The final design review for the WESF modification design comments due date was extended to March 25, 2019.
- A final design review for the MASF mockup facility was initiated on March 20, 2019. Comments are due on April 3, 2019.
- Completed mobilization, and pothole excavation was initiated on CSA utility verification. The test pits are required to determine the integrity and location of existing firewater pipelines, and will provide an opportunity to field verify drawing information at the point of tie-in (pipe material, size, and condition).

13.25 Capsules Interim Storage Operations

- CHPRC has completed verification of incorporation of comments into the final design media for CSS.

River Risk Management Project

13.10 Environmental Restoration Disposal Facility

- Received 4,595 tons of waste for disposal in March.
- Received 62,998 tons of waste for disposal FYTD.
- Received 14 shipments (152 tons) of Plutonium Finishing Plant (PFP) waste and used the new enhanced radiological controls during disposal operations.

13.12 Integrated Disposal Facility (IDF)

- Care and Custody
  - Completed quarterly inspections and March monthly inspections.
  - Continued transferring clean water from the leachate storage tanks. Nearly 900,000 gallons were transferred in March. The source of this water is snowmelt within the IDF cells.
- IDF Operational Readiness Resource Conservation and Recovery Act (RCRA) Permit Modifications.
  - Completed resolution of Ecology comments on Addenda A, Part A, and Addenda E, Security.
  - Continued development of RCRA Permit Addenda C, Process Information; Addenda G, Training; Addenda H, Closure Plan; Addenda K, Post–Closure; Addenda I, Inspection; and Addenda B,

Waste Analysis Plan, Addenda F, Preparedness and Prevention, and the waste acceptance criteria to support IDF RCRA permit modifications.
- o Initiate review of the 60 percent design resubmittal.
- o Provided support to RL Legal to initiate development of strategy for obtaining an in-trench treatability variance for IDF.

Project Technical Services Support
- Conducted contract award and premobilization activities for NR-1 Reactor Surface Preparation. Mobilization has been scheduled for early April 2019, and the work package development is completed.
- Initiated excavation at the CSB to expose an existing 12-inch water line in support of the W-135 project utility line investigation.
- Completed CSA 90 percent design review in support of the W-135 CSA construction.

MAJOR ISSUES

Issue:
Ecology has indicated that they may require the 90 percent design package for the CSA prior to issuing the permit for public comment.

Corrective Action:
Work with Ecology to issue the permit with the design information that is available at the time of permit issuance.

Status:
The permit application was formally submitted to Ecology on November 21, 2017, with the 30 percent design information as agreed in the permitting plan. Ecology's completeness review for the WESF permit modification request was received on February 5, 2018. Ecology's completeness review for the Capsule Interim Storage (CIS) permit application was received on February 13, 2018. Ecology concluded that the permit applications were incomplete. Additional information to address the completeness review was transmitted to Ecology on May 8, 2018. On January 31, 2019, Ecology issued a completeness determination for the CSA permit application. Ecology determined that based on additional information submitted by the permittees, the permit application is complete. In conjunction with the letter, Ecology provided formal copies of the technical comments on the addenda. WFM personnel are working to resolve the technical comments.

Issue:
Ecology issued findings in inspection reports for the LLBG Trenches 31-34 and CWC regarding major risk labeling. The findings direct RL and CHPRC to label the containers with the major risks of the dangerous waste contents. CHPRC uses the U.S. Department of Transportation (DOT) hazard class labeling system (which includes the use of radiological labels) to comply with the regulatory requirement. The proposed amendments to Washington Administrative Code (WAC) 173-303 were adopted on January 28, 2019, and will be effective on April 28, 2019.

Corrective Action:
Work with RL to obtain agreement from Ecology that CHPRC may use the DOT hazard class labeling system, as this complies with the regulatory requirement for a "system" in use that performs the function in accordance with local, state, or federal regulations. Corrective Actions are specified as the bulleted items per RL correspondence letter 19-ESQ-0054, dated March 20, 2019.

Status:
CHPRC and RL met with Ecology inspectors regarding this item and the parties agreed to elevate the issue to management for resolution. Ecology is working through the rule-making process to incorporate these requirements into the regulations but continues to identify this issue in recent inspections. The project continues to await direction from RL. The proposed amendments to WAC 173-303 were adopted on January 28, 2019, and will be effective on April 28, 2019. In response, RL issued correspondence letter 19-ESQ-0054 to Ecology on March 20, 2019, formally documenting the 'Major Risk Labeling Path Forward.' The bulleted action items within this correspondence letter "will be completed within the implementation period (or effective date)." This will no longer be reported as a major issue and will be removed from future reports.

Issue:
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) in Carlsbad, New Mexico. The 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; over-packing drums). Streamlined and consolidated container management procedures. RL authorized the additional fiscal year (FY) 2019 TRU commercial repackaging, allowing shipments to PFNW for repackaging to continue throughout the year.

Issue:
TK-100 is a collection tank located underground to the south of the 225B Building and collects miscellaneous contaminated or potentially contaminated waste liquids. TK-100 has an approximate capacity of 4,000 gallons. The current volume of TK-100 is approximately 3,400 gallons. Recent sampling of TK-100 indicated a cesium (Cs)-137 sample result higher than the acceptance criteria at the Effluent Treatment Facility (ETF). As a result, disposal of the tank contents via the normal route to the ETF via tanker truck may not be possible.

Corrective Action:
Determine the most cost effective path forward for disposal of the TK-100 contents.

Status:
Planning efforts have been completed, which include using an ion-exchange module (IXM) to reduce the Cs-137 inventory, thereby allowing shipment of the liquid to the ETF. A work package was prepared and passed through a Hazard Review Board. Recirculation activities were conducted throughout February as weather conditions allowed. Samples of the TK-100 contents have been taken and sent to an offsite laboratory for analysis. The IXM has been disconnected from TK-100 and shipped to ERDF for disposal. Awaiting Washington River Protection Solutions (WRPS) ETF management review and acceptance of the documentation prior to receipt/loading of their Polar Tanker and ultimate transfer of the TK-100 contents to Liquid Effluent Retention Facility.

Issue:
It was determined by dynamometer that the WESF truck port cover block measured weight is 30,900 pounds, which is three percent higher than the historical baseline documents for the cover block. This weight exceeds the rated capacity of the WESF canyon crane by 900 pounds (three percent).

Corrective Action:
Agreed with RL to perform a planned engineering lift in accordance with ASME B30.2-2016. Additionally, RL requested that CHPRC have a discussion with the crane vendor to determine if vulnerabilities or lessons learned (LL) associated with this vintage/model of crane exist.

Status:
The vendor communication resulted in the need to evaluate the replacement of the gearbox gears due to a lesson learned failure with a crane of similar construction/vintage. Work has been resequenced as a result of this change in path. Procurement of replacement gearbox gears is in progress.

Issue:
On August 14, 2018, notification was received (18-AMRP-0151) informing CHPRC that RL is supportive of enhancing the operating margin for the cesium salt-metal interface temperature by increasing the number of casks (as appropriate, up to 24 casks) to reduce the heat load in each individual cask in order to bound the range of uncertainty.

Corrective Action:
CHPRC transmitted a response letter to RL in October 2018. CHPRC will revise the Hastelloy emissivity for the strontium cask and evaluate increasing the operating margin for the cesium casks. Results of the emissivity change will be incorporated into the final design and analysis of increasing the operating margin will be completed after the CSS final design has been approved.

Status:
Analysis of the Hastelloy emissivity has been completed resulting in the requirement for one additional strontium capsule storage cask. Analysis for increasing the cesium thermal storage margin will be initiated at the completion of the final design.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
Explanation of major changes to the project monthly stoplight chart: Risk WSD-CSS-003ADOE, *Additional Casks Needed - Thermal Limits*, was added as a realized risk.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
13-RCRA-REV9-001: RL-13 - Additional DWMUs	Unplanned Dangerous Waste Management Units (DWMUs) are added to the scope requiring additional document support, impacting the project in both cost and schedule. **Risk Handling Strategy:** Accept **Probability:** Very Likely (>90%) **Worst Case Impacts:** $0K, 48 days			**Risk Event:** Ecology provided technical comments on permit addendum expanding the number of DWMUs. **Risk Recovery Action(s)** / **FC Date** / **%** Incorporating changes to respond to comments. / Ongoing / N/A **Risk Action Assessment:** No significant changes in March. The impacts associated with the realization of this risk are ongoing. As such, this risk will continue to be reported on for visibility until it no longer poses a threat to the project.
13-RCRA-REV9-003: RL-13 - Ecology Delays	Scope supported by Ecology is impacted by delays in Ecology review time that do not align with the Permit Management Schedule. This requires recovery actions to be taken by the project that results in schedule impacts. **Risk Handling Strategy:** Accept **Probability:** Very Likely (>90%) **Worst Case Impacts:** $0K, 96 days			**Risk Event:** Ecology's review time is impacting the Permit Management Schedule. **Risk Recovery Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Risk Action Assessment:** No significant changes in March. Preparing resources to respond to comments when they are received. The impacts associated with the realization of this risk are ongoing. As such, this risk will continue to be reported on for visibility until it no longer poses a threat to the project.
WSD-138: Regulatory document (closure plan with ecology) results in significant comments from the regulator	Significant comments from the regulator on closure plans submitted for approval results in non-approval of the permit or re-work, causing schedule impacts to the project. **Risk Handling Strategy:** Control **Probability:** Very Likely (>90%) **Worst Case Impacts:** $0K, 96 days			**Risk Event:** Eight closure plans were formally resubmitted to Ecology in August 2018 and November 2018. In January 2019, Ecology provided additional comments changing the closure strategy for several units. **Risk Recovery Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Risk Action Assessment:** No significant changes in March. RL informed Ecology that additional document revisions would not be completed at this time. The impacts associated with the realization of this risk are ongoing. As such, this risk will continue to be reported on for visibility until it no longer poses a threat to the project.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0013/WBS-013</td></tr>
<tr><td>WSD-CSA-007: Delays in CSS Design Impact PDSA</td><td>The final development of the Preliminary Documented Safety Analysis (PDSA) is impacted due to delays in completing the CSS final design, resulting in schedule impacts to the CSA construction and CSS fabrication.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $0K, 96 days</td><td>  </td><td>  </td><td>Risk Event: The CSS final design was delayed due to late identification of the need for additional shielding in the cask design due to the unique nature of the capsules. The final design was revised to reflect a more conservative assumption for Hastelloy emissivity for the strontium capsules. Accident analysis, needed to support development of the PDSA, cannot be completed until the final design is complete. The PDSA development cannot complete until CSS design is complete.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>CHPRC has provided draft PDSA for review and comment to internal reviewers and DOE to allow early feedback and comment incorporation.</td><td>Complete</td><td>100</td></tr><tr><td>CHPRC is working with the CSS design contractor to prioritize accident analysis needed for the PDSA development.</td><td>Complete</td><td>100</td></tr><tr><td>Complete shielding design and accompanying analysis for final design.</td><td>Complete</td><td>100</td></tr><tr><td>Review CSS final design and incorporate into PDSA.</td><td>Complete</td><td>100</td></tr><tr><td>Submit PDSA to DOE for approval.</td><td>5/24/19</td><td>0</td></tr></table>
Risk Action Assessment: No significant changes in March. The CSS final design (including Hastelloy emissivity revision) was submitted to CHPRC for review in November. Comment disposition and incorporation into the final design media is in progress. Initial input from the final design to the PDSA is complete and internal review of PDSA is complete. Based on feedback from RL nuclear safety, additional detail is being added to PDSA prior to submittal.

Based on the current status of the design, this risk is no longer considered to be a threat to the project. As such, it will be closed and removed from the stoplight chart prior to April reporting.</td></tr>
<tr><td>WSD-TR-04: Weather Delays Shipment</td><td>Weather conditions do not meet the requirements for shipments and the shipment must be delayed until favorable weather conditions exist, resulting in schedule delays.

Risk Handling Strategy: Accept

Probability: Medium (26% to 74%)
Worst Case Impacts: $0K, 16 days</td><td>  </td><td>  </td><td>Risk Event: In February and March, there were a significant number of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities, where non-essential personnel were directed not to report to work. Due to these conditions, shipments were not able to be made.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Implement two additional double shipments.</td><td>3/28/19</td><td>50</td></tr></table>
Risk Action Assessment: The weather cancellation in March delayed the second double shipment by one week. Pending no further weather associated delays in April; this risk will be removed from the stoplight prior to April’s reporting cycle. This risk will continue to be monitored throughout the remainder of its lifecycle.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td colspan="5">No critical risks identified in March.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td>WSD-013B: TRU Waste Volumes or Characteristics - Processing</td><td>TRU waste not identified in records or higher-than-planned volumes due to inaccurate records or unexpected soil contamination impacts TRU processing. This waste is derived from retrieval of waste, non-compliant newly generated waste received from generators, TRU waste that is determined to be low-level and requires further treatment, or more waste is generated than in the plan, resulting in unplanned in-scope cost impacts.

Risk Handling Strategy: Accept

Probability: Medium (26% to 74%)
Worst Case Impacts: $2 million, 0 day</td><td>  </td><td>  </td><td>Risk Trigger Metric: A significant volume of newly generated waste is received or nonconforming waste results in the need for new capabilities.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>None identified at this time.</td><td>N/A</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. The destruction of two drums with oil from large box shipment TC158 was not performed at the offsite processing facility due to backlog. An exception to 0063 and a waste profile were approved to temporarily store the waste at CWC until the offsite facility is ready to treat the waste.</td></tr>
</table>

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0013/WBS-013</td></tr>
<tr><td>WSD-097: Major Equipment Failure – T Plant</td><td>T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts and schedule delays.

Risk Handling Strategy: Control

Probability: Low (10% to 25%)
Worst Case Impacts: $3 million, 96 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: During planned facility operation activities, a suspected system component is discovered that requires attention or an unexpected malfunction results in this risk being realized. This risk will continue throughout the CHPRC (September 30, 2019) contract.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Identify and procure critical spare parts for the T Plant crane.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Implement aggressive CM/PM program.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. The project has put into place mitigating strategies (i.e., aggressive surveillance and maintenance [S&M] activities) to help reduce this risk. Mechanical maintenance on the canyon crane was completed in November. The annual electrical crane maintenance, including the camera cable, was completed in February. The canyon crane is currently operational and spare parts have been procured for most critical spares.</td></tr>
<tr><td>WSD-136: CWC/WRAP Components Fail</td><td>CWC facilities and components may reach their end of life. These items will need to be replaced and/or repaired outside of planned funding profiles, resulting in cost impacts.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $2 million, 0 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: Maintenance activities at CWC increase due to aging facilities.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Floor repairs, Master Documented Safety Analysis (MDSA) container stacking requirements, replacement of exhaust fans.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conduct fieldwork for 2727W deactivation.</td><td>Complete</td><td>100</td></tr><tr><td>Conducting doorframe replacements and electrical equipment repairs as necessary.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. The WRAP roof was analyzed for structural integrity following water intrusion. There was insufficient basis for the roof’s integrity, which may lead to an eventual roof replacement. The MDSA container stacking requirements are complete. Maintenance work at CWC will be scheduled based on facility work priorities. Additional Fire Alarm Control Units spare parts were obtained from the deactivation of 2727W.</td></tr>
<tr><td>WSD-CSA-006: Ecology Temporary Authorization contingent on 90% Design for CSA RCRA Permit Application</td><td>Ecology will, as a pre-condition to approve the temporary authorization (TA) for CSA construction, require that the CSA 90 percent detailed design package to be incorporated into the CSA RCRA permit application (to issue for public comment), thereby delaying the TA and impacting the CSA construction schedule.

Risk Handling Strategy: Accept

Probability: Very Likely (>90%)
Worst Case Impacts: $0, 96 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: Ecology requires the 90 percent design package for the CSA to be completed prior to issuing the permit for public comment.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>None identified at this time.</td><td>N/A</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. CHPRC continues to have regular interfaces with Ecology to discuss the issue and are evaluating options should the 90 percent design be required. The permit application was formally submitted to Ecology on November 21, 2017, with the 30 percent design information. The project received a determination of incompleteness on February 13, 2018. The determination of incompleteness is primarily associated with the need for additional design information. CHPRC submitted supplemental design information for the WESF modifications and CSA to RL in May to support Ecology’s completeness determination. RL has transmitted this information to Ecology. Ecology has determined that the permit application is complete. The project anticipates that a temporary authorization will be necessary, if the permitting process is not timely.</td></tr>
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<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0013/WBS-013</td></tr>
<tr><td colspan="5">FY2019 Risk Triggers (Risk could be realized in FY2019)</td></tr>
<tr><td>WSD-125: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues</td><td>A pause in waste processing results in an unexpected container degradation within Solid Waste Operations Complex (SWOC) (excluding TRU retrieval activities) and requires additional resources to respond.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $3 million, 0 day</td><td>  </td><td>  </td><td>Risk Trigger Metric: Degraded containers are discovered in CWC.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform daily/weekly waste container surveillances to identify container abnormalities.</td><td>Ongoing</td><td>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>Ongoing</td><td>N/A</td></tr><tr><td>Process waste packages at a rate funded by RL.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Procuring stainless steel 85-gallon over-packs for alternative storage of containers that show signs of degradation.</td><td>Complete</td><td>100</td></tr><tr><td>FY2019 Over-packs planned: 200</td><td>9/25/2019</td><td>0</td></tr></table>
Mitigation Assessment: No significant changes in March. The project continued to perform container surveillances in March to identify container and container cover abnormalities. RL authorized additional FY2019 TRU commercial repacking, allowing shipments to PFNW for repackaging to continue. The remaining containers will continue to require surveillance and enhanced monitoring.</td></tr>
<tr><td>WSD-W135-19: Unexpected Contamination is Found in the WESF Facility</td><td>More contamination is found at WESF resulting in the need to clean it up to reduce worker exposure or requiring more worker protection.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $2,000K, 32 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: During WESF preparations for equipment installation (in the G Cell, the canyon, or the truck port) contamination is found that requires decontamination. During equipment installation, contamination is encountered that requires cleanup (e.g. anchoring of equipment inside WESF causes release of contamination).

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Hire additional supervisor and RADCON workers to remain in compliance with stringent rad controls.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Implement lessons learned.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Continuously utilize respiratory protection.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. Waste packaging in the canyon is substantially complete; however, waste removal is impacted by WESF canyon crane and truck port cover block weight issues. To date, no excessive contamination has been discovered in the canyon. Decontamination efforts in G Cell are complete.</td></tr>
<tr><td>WSD-W135-31: Canyon Crane non-functional/not Serviceable</td><td>The existing WESF crane was put back into limited usage for the W-130 Project; however, the crane is found to be unserviceable, cannot be repaired for use, or fails during the W-135 operational activities.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $300K, 96 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: The canyon crane fails during use or cannot be returned to service after maintenance.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Procure new crane hook and block.</td><td>9/30/18</td><td>100</td></tr><tr><td>Perform preventive/corrective maintenance procedures (i.e. replacement of the wire rope and hook) on the crane early to identify corrective maintenance issues.</td><td>9/30/19</td><td>50</td></tr><tr><td>Refurbish current crane block.</td><td>9/30/20</td><td>0</td></tr><tr><td>Procure critical spares.</td><td>9/30/21</td><td>0</td></tr></table>
Mitigation Assessment: No significant changes in March. Performance of the full annual preventive maintenance package is complete. As part of mitigation actions for the canyon crane capacity issue, the crane manufacturer was consulted to gain insight on any issues with this make/model of crane. Manufacturer does not have data on the WESF crane, but recommended inspection of the gears for stress fractures. Engineering has determined that the best path forward is replacement of the gears at risk given crane history and prior usage. Planning to perform this work is in progress. Material orders for gear box parts are in progress. Replacement of the wire rope and hook is on hold pending preparations for truckport coverblock removal. If full refurbishment is unsuccessful, replacement of the canyon crane as a like-for-like is not possible, as the original crane manufacturer is no longer in business. A similar replacement hook and block have been procured.</td></tr>
</table>

<table>
<tr><th>Risk Title</th><th>Unmitigated Risk Impacts</th><th colspan="2">Assessment
Month | Trend</th><th>Comments</th></tr>
<tr><td colspan="5">RL-0013/WBS-013</td></tr>
<tr><td>WSD-CSS-002: Subcontractor Change Orders and Claims</td><td>The CSS construction contractor submits excessive change orders and claims, resulting in schedule delays and increased subcontractor cost.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $2,900K, 24 days</td><td>  </td><td>  </td><td>Risk Event: The CSS construction contractor will fabricate CSS equipment under a fixed price contract. If changes to the design are found to be necessary during fabrication, change orders may be submitted by the fabricator.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Bid award will be based on best value approach to allow selection of the best qualified contractor. Contractor selection will be handled by formal evaluation processes to ensure scope is understood and estimated correctly.</td><td>Complete</td><td>100</td></tr><tr><td>Scope of each task will be reviewed prior to initiation to ensure contractor is in alignment for the upcoming work. Contractor oversight is accomplished via weekly interface meetings and trips to the contractor’s location for face to face interface meetings.</td><td>Ongoing</td><td>N/A</td></tr></table>
Risk Action Assessment: CSS final design review comment resolution is in progress. Fabrication of CSS equipment is not planned until FY2020.</td></tr>
<tr><td>WSD-CSS-011: Greater than Expected Comments on CSS Design are Received</td><td>The CSS design receives more comments than originally expected, resulting in schedule delays.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $600K, 48 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: CSS final design review comment resolution exceeds the time planned due to volume or difficulty in comments.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>CHPRC will provide recommendations for comment resolution, minimizing the effort to respond.</td><td>4/30/19</td><td>90</td></tr><tr><td>CHPRC will work closely with NAC during comment resolution to ensure all comments are understood.</td><td>4/30/19</td><td>90</td></tr></table>
Mitigation Assessment: No significant changes in March. The CSS final design review is in progress. Comments were reviewed prior to transmittal to the design contractor for duplications, editorial comments, and comments which must be answered internally to minimize effort to respond. CSS design contractor has provided revised design media with comments incorporated for CHPRC back check. Some comments generated during the final design review necessitate additional analysis to resolve. These additional analyses are necessary for WESF DSA development and will be completed in parallel with analysis necessary to increase operational margin for cesium casks.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified risks/opportunities)</td></tr>
<tr><td colspan="5">No unassigned risks identified in March.</td></tr>
</table>

PROJECT BASELINE PERFORMANCE
Current Month (CM)
($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	(2.6)	(1.8)	12.0	0.7	-28.3%	(13.8)	749.3%

Numbers are rounded to the nearest $0.1 million

CM Schedule Performance (+$0.7M/-28.3%)

The CM positive schedule variance is primarily due to the implementation of a March Baseline Change Request (BCR) for the CSS final design, which re-sequenced work due to a change in strategy for the revision of the Hastelloy emissivity for Sr capsules and reduction of the cesium capsule salt-interface temperature to 270-degrees.

CM Cost Performance (-13.8M/+749.3%)

The CM negative cost variance for W&FMP is attributed to the March 2019 implementation of BCR-PRC-19-012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the performance measurement baseline (PMB) from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REAs), through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019. Implementation of this BCR resulted in a one-time adjustment to the current period budget for work that had been planned in prior years that was modified by the agreement and to reflect the agreed values of the impacted scope. This adjustment caused negative current period budgeted cost of work scheduled (BCWS) with corresponding negative current period budgeted cost of work performed (BCWP).

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)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,401.3	1,398.3	1,312.1	(2.9)	-0.2%	86.2	6.2%	1,484.1	1,396.7	84.6	87.4

Numbers are rounded to the nearest $0.1 million

CTD Schedule Performance (-$2.9M/-0.2%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+$86.2M/+6.2%)

The CTD favorable cost variance is a result of realizing efficiencies such as organizational flattening and streamlining; right-sizing capabilities for planned scope; optimizing resources with reorganization and consolidation of engineering capabilities across W&FMP; combined administrative/records functions across WESF and CSB; removing waste from building(s) and reducing the need for inspections/surveillances; reducing the size and number of radioactive areas/radioactive material areas and associated surveillances/routines and records; tagging out unneeded equipment and reducing the frequency and number of PM activities; increasing shared resources across all of SWOC; reducing dedicated resources for the Corrective Action System (CAS) and using project-wide support; optimizing maintenance scheduling and execution reducing operations field work supervision; increasing emphasis on managing planned absence coverage within existing resources; simplifying and optimizing acquisition and procurement management within W&FMP; and eliminating the separate waste forecast system by integrating forecasting as part of the baseline process and the Solid Waste Inventory Tracking System (SWITS).

Variance at Completion (+$87.4M/+5.9%)

The favorable VAC is a result of realizing efficiencies such as organizational flattening and streamlining; right-sizing capabilities for planned scope; optimizing resources with reorganization and consolidation of engineering capabilities across W&FMP; combined administrative/records functions across WESF and CSB; removing waste from building(s) and reducing the need for inspections/surveillances; reducing the size and number of radioactive areas/RAM and associated surveillances/routines and records; tagging out unneeded equipment and reducing the frequency and number of PM activities; increasing shared resources across all of the SWOC; reducing dedicated resources for CAS and utilizing project-wide support; optimizing maintenance scheduling and execution; reducing operations fieldwork supervision; increasing emphasis on managing planned absence coverage within existing resources; simplifying and

optimizing acquisition and procurement management within W&FMP; and eliminating the separate waste forecast system by integrating forecasting as part of the baseline process and SWITS.

Contract Performance Report Formats are provided in Appendix A

FUNDS vs. SPEND FORECAST ($M)

	FY2019		
WBS 013/RL-0013	**Projected Funding**	**Spending Forecast**	**Variance**
Waste Stabilization & Disposition	173.5	155.2	18.3
Management of Cesium and Strontium Capsules (Line Item)	6.6	2.9	3.7
Incremental Scope Pending Change Management	0.0	0.6	(0.6)
RL-0013 – Total	180.1	158.8	21.3

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis
The FY2019 projected funding level for project baseline summary (PBS) RL-0013 of $180.1 million is based on the RL integrated priority list. The FY spending forecast of $158.8 million includes actions anticipated to achieve funding targets.

Critical Path Schedule
Critical path analysis will be provided upon request.

MILESTONE STATUS

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-091-53	Submit Milestone Change Request to Replace Target Dates for Capabilities to Process TRUM Waste	4/30/2019		4/30/2019	On schedule, negotiation extended.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
CONTRACT			
J.12/C.2.2, C.2.3	PBS-RL-0011, Plutonium Finishing Plant Closure Project PBS-RL-0013, Solid and Liquid Waste Treatment and Disposal	Offsite transportation of radioactive material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford Site and Northwest locations. RL is the authorized shipper and acts as signatory on the shipping papers, and ensures compliance with DOE Manual 460.2-1. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) Level VI vehicle inspections and verifies that the government drivers meet the applicable DOT Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or treatment, storage, and disposal (TSD) requirements.	Ongoing
J.12/C.2.3.6	PBS-RL-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.	No WIPP shipments are planned within the remaining contract period of performance.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
CSB – Obtain RL DSA Approval	1/31/2018 (A)	4/30/2019
Retrieve RSW EE/CA for CH & RH – RL Complete Review of Draft Document	3/12/2019 (A)	4/18/2019
DOE Review IDF DSA	4/23/2019	8/20/2019
CSS Final Design – RL Direction to Implement Impacts of Operating Margin Increases per RL: 18-AMRP-0151	5/3/2019	5/16/2019
CSA CD2/3 – RL: Review/Approve PDSA (1st FY)	5/9/2019	7/21/19
DOE Final IDF DSA Review and SER Prep	9/3/2019	9/30/2019

Section D
Soil and Groundwater Remediation Project (RL-0030)

CH2MHILL
Plateau Remediation Company

W. F. Barrett
Vice President and
Project Manager for
Soil and Groundwater
Remediation Project

M. A. Wright
Vice President for
Project Technical
Services

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

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

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

Treatment Facility	Million Gallons Treated		Chrome (kg)		Carbon Tet (kg)		Tech-99 (pCi)		Uranium (kg)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX P&T	24.4	158.2	2.1	15.4						
HX P&T	18.4	134.6	1.7	13.2						
KR-4 P&T	11.4	65.7	0.0	0.6						
KW P&T	11.1	71.8	0.3	2.8						
KX P&T	39.1	231.8	1.9	12.9						
200 West P&T	90.2	541.8	6.7	46.5	146	1018	$1.8x10^{11}$	$9.5x10^{11}$	11.6	37.9
Combined	**194.7**	**1,203.7**	**12.7**	**91.4**	**146**	**1018**	**$1.8x10^{11}$**	**$9.5x10^{11}$**	**11.6**	**37.9**
FY2019 KPG	**--**	**1,800.0**	**--**	**N/A**	**--**	**N/A**	**--**	**N/A**	**--**	**N/A**

Well Drilling by Area	FY2019 Planned	Current Month	FY2019 Cumulative
100-KR-4	2	0	2
100-HR-3	10	3	5
200-BP-5	4	0	0
200-UP-1	3	0	0
200-ZP-1	5	0	0
M-24 Milestone	5	0	0
100-F/IU	6	0	0
Total Wells	**35**	**3**	**7**
Site Wide Boreholes	**9**	**0**	**0**

EMS Objectives and Target Status

Objective Action Plan #	Objective	Due Date	Status
19-EMS-SGRP-OBJ1-P1	Reduce adverse environmental impact to health and the environment by monitoring and confirming low-carbon tetrachloride emissions at the 200 West P&T Facility. Evaluate treated off-gas analytical results from compliance sampling and process sampling each quarter.	7/31/2019	50%
19-EMS-SGRP-OBJ2-P1	Installation and testing of a high-density polyethylene (HDPE) pipeline between Modular Storage Units (MSU) and the 200 West P&T. Objective will eliminate the need to truck the MSU water to the P&T and thereby reduce greenhouse gas emissions and other waste production from vehicle use.	12/31/2018	100%
19-EMS-SGRP-OBJ3-P1	Use of electronically completed Groundwater Sampling Reports (GSR) in FLEDGE 3.0. This will lead to a reduction in paper use and waste through completion and record storage of GSRs electronically.	9/30/2019	90%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	1	18	3/7/2019 – Employee slipped and fell on ice, injuring the left shoulder, elbow, arm, and right knee. Employee was evaluated at HPMC and released without restrictions. (25098)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Strategic Integration

- Completed resolution of RL comments on Chapters 1 and 2 of the cumulative impact evaluation (CIE) approach document.
- Submitted the CIE approach document Chapter 5 (Quality Assurance) and Chapter 6 (Maintenance) to RL for review.
- Completed troubleshooting and performed initial login to the new modeling computing system (Gaia) in the HLAN environment. The new computing system will replace the aging (Tellus) system.

River Corridor

300-FF-5 Operable Unit (OU)

- Completed drilling and sampling of the nine Stage B Uranium Sequestration post injection boreholes on March 26, 2019. Samples were collected from these boreholes for uranium leach testing to help assess the effectiveness of the sequestration effort.

100-HR-3 OU

- Completed installation and development of four monitoring wells in the Ringold Upper Mud (RUM). Initiated drilling the fifth RUM monitoring well on March 11, 2019.

100-KR-4 OU

- Completed revision of the technical impracticability (TI) waiver and provided to U.S. Environmental Protection Agency (EPA) on March 7, 2019, for submittal to EPA Region 10 for review.
- Continued excavation of the trenches and installation of the lateral distribution system for the KW Treatability Test

Central Plateau

200-UP-1 OU

- Received approval of TPA-CN-0846 for adding two Resource Conservation and Recovery Act (RCRA) and two Atomic Energy Act wells planned for drilling in fiscal year (FY) 2019 and FY2020 to the 200-UP-1 Waste Management Plan on March 18, 2019.

200-ZP-1 OU

- Continued drilling on two of the three monitoring wells to improve understanding of the carbon tetrachloride distribution in the groundwater. One of the monitoring wells reached the total depth on March 18, 2019.
- Briefed RL on February 28, 2019, on the data quality objectives (DQOs) process for the Ringold A characterization. This DQO uses existing data to develop performance criteria for new data being collected next year for the Ringold A characterization.

Central Plateau Closure Plans

- Resolved RL and Ecology comments on the 216-A-29 Ditch closure plan on March 21, 2019.

Project Technical Services

- Training and Procedures published a sampling procedure that replaces the Waste Packaging and Labeling Instructions Sheet with the Waste Planning Checklist as the method to communicate marking and labeling instructions to waste generators. The change is consistent with a recent revision to PRC-PRO-WM-52692, *Waste Planning, Packaging, and Labeling*.
- Operations Program
  - Supported lockout/tagout management assessment at the request of Soil and Groundwater Remediation Project management.
  - Met with project personnel to review craft concerns with language in PRC-PRO-GD-54266, *Hazardous Energy Controls,* and drafted change to present to Hazardous Energy Control Technical Review Board.
- Project Delivery
  - Completed greenfield bonding work, excavation of lateral lines, installation of lateral polyvinyl chloride piping, and infiltration system testing at the KW Soil Flushing Treatability Test site.
  - Continued fabrication of filter housing for YE33.
  - Completed final tie in work at KX/XE4. The construction completion document was approved and turned over to operations.
  - Commenced installation of permanent power source for MO651.

Groundwater P&T Facilities

200 West P&T

- Operated the 200 West P&T at an average of 2,021 gallons per minute (gpm) in March.
  - Completed alternating frequency device replacement of 200-BP-5 extraction well YE29.

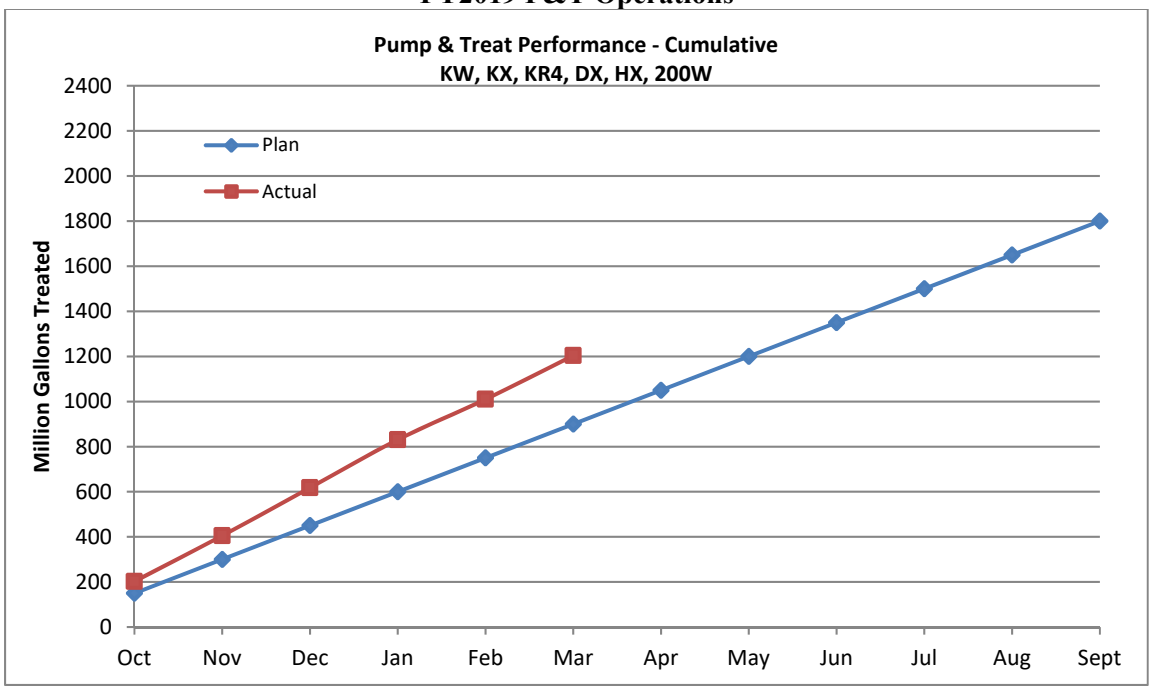
100 Area P&Ts

- Operated the DX P&T at 547 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 254 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 248 gpm, below the facility capacity of 330 gpm.
- Operated the KX P&T at 877 gpm, below the facility capacity of 900 gpm.
  - Completed transition of extraction well XE4 from well 199-K-141 to 199-K-234.
- Operated the HX P&T at 413 gpm, below the facility capacity of 900 gpm.
  - Completed distributor replacement in ion exchange vessels C1 and F1.

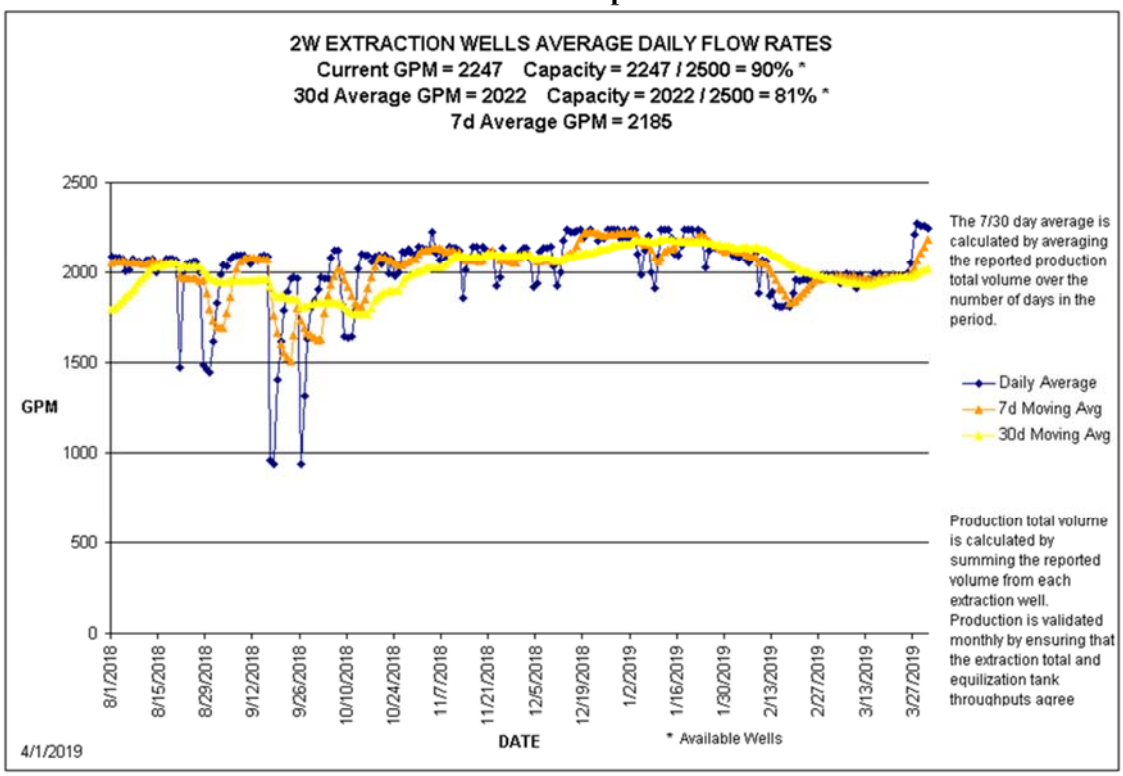
Groundwater P&T Facilities

- Overall, the P&T systems operated above the targets as depicted in the P&T performance graph below.

FY2019 P&T Operations



200 West P&T Operations



MAJOR ISSUES

Issue:
On March 7, 2019, EPA notified RL that EPA Headquarters (HQ) requires a review of the Draft Revision 0 Proposed Plan (PP) prior to the initiation of the public comment period. This requirement was not included in the FY2019 planning assumptions because an EPA HQ review has not been historically required. EPA HQ's review will delay completion of the PP and may prevent achieving the 2019 Key Performance Goal, *Initiate 100-BC-5 Proposed Plan Public Review*. Currently, the Draft Revision 0 is forecast to transmit to EPA HQ in May 2019 for a 75-calendar day review period, which has absorbed all of the project's float and has pushed some FY2019 scope into FY2020.

Corrective Action:
The unplanned EPA HQ review is outside of CHPRC control. CHPRC will maintain contact with RL and EPA to monitor progress of EPA HQ review of the document, and evaluate and report impacts to the project.

Status:
Final EPA legal comments are being incorporated into the Draft A PP. The document will then be updated to Draft Revision 0 and prepared for transmittal to EPA HQ in May 2019.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0030/WBS-030				
Explanation of major changes to the project monthly stoplight chart: The following changes have been incorporated into the monthly stoplight: 1) Risk *SGW-ZP1-02: ZP1 - Well Re-Alignment Design Differs from Planning Assumptions* has re-characterized as a low risk threat value and will be removed from the monthly stoplight chart for the next reporting period. 2) Risk *SGW-BC5-01: Greater Than Expected Comments from RL or Regulators* was added to the High Risk Threat Value section. 3) Risk *SGW-BC5-06DOE: BC5 – Regulator Delays Impact KPG* was added to the unassigned risk section pending ownership (Transfer Risk).				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks identified in March.				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
SGW-BC5-01: BC5 – Greater Than Expected Comments from RL or Regulators	Comments from RL and/or regulators on CERCLA documents submitted for review/approval are excessive, need multiple rounds of comment resolution, and are global in nature, causing both cost and schedule impacts to the project. **Risk Handling Strategy:** Accept **Probability:** Very Likely (>90%) **Worst Case Impacts:** $30K, 64 days			**Risk Trigger Metric:** Additional rounds of comments are required to support completion of CERCLA documentation. **Mitigation action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment:** Due to additional review of the Proposed Plan (PP) by EPA HQ, CHPRC will be required to perform, at a minimum, one additional round of comment incorporation. The extent of impact associated with this additional round of comment incorporation is yet to be determined, as CHPRC will not receive comments from EPA HQ until late summer (August FY19). Once comments are received, this risk may be elevated to the realized risk section.

Risk Title	Unmitigated Risk Impacts	Assessment Month	Assessment Trend	Comments
RL-0030/WBS-030				
SGW-ZP1-02: ZP1 - Well Re-Alignment Design Differs from Planning Assumptions	The final design for a given well realignment or connection exceeds the planning assumptions, resulting in cost impacts. **Risk Handling Strategy:** Accept **Probability:** Very Likely (>90%) **Worst Case Impacts:** $1,512K, 16 days			**Risk Trigger Metric:** Planning assumption quantities are exceeded or design maturity changes material type, requiring additional material and labor to complete the scope. **Mitigation action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment:** End point criteria for the design has been completed with cost effective design solutions being implemented. This risk has been re-characterized as a low-risk threat value, resulting in its removal from the monthly stoplight charts during the next reporting period.
FY2019 Risk Triggers (Risk could be realized in FY2019)				
No FY2019 risk triggers identified in March.				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
SGW-BC5-06DOE: BC5 – Regulator Delays Impact KPG	Completion of the Proposed Plan is delayed as a result of an extended regulator review, leading to schedule delays that will prevent completion of RL's KPG Initiate 100-BC-5 Proposed Plan Public Review. CHRPC Comment: EPA notified CHPRC on March 7, 2019, that EPA HQ must review the Draft Revision 0 Proposed Plan (PP) prior to the initiation of the public comment period. The additional review by EPA HQ was not anticipated in the FY19 baseline planning, and now poses a threat to the completion of KPG Initiate 100-BC-05 Proposed Plan Public Review. CHPRC position is this risk is out of our ability to manage; CHPRC has no control of the time sensitivity of completion of this document by EPA HQ. In addition, this is a "first of kind" request during the lifecycle of the PRC contract to have EPA HQ review a CERCLA document. The outcome of this review carries a high level of uncertainty. CHPRC is working with DOE to establish risk ownership. Once ownership is established, the monthly report will be updated appropriately.			

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	5.9	6.4	8.7	0.5	7.7%	(2.3)	(35.6)%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance (+$0.5M/+7.7%)

Primary drivers for the positive current period schedule variance include:

- The early start of 100-HR-3 and 100-KR-4 well realignment design activities last fall allowed early performance of construction activities this month, generating a positive schedule variance.
- Modeling supporting the 200-ZP-1 Focused Feasibility Study started early to support negotiations with EPA.
- The 200 West P&T reporting team completed the internal review and update of the performance monitoring plan in March, correcting the previously behind schedule condition, and generating positive schedule performance. The performance optimization evaluation, planned to start in April, was initiated in January, and progressed steadily in March. A prior year activity was deleted from the performance measurement baseline (PMB) in March as part of the implementation of the global settlement baseline change request (BCR) (*see description of global settlement under cost variance section*), generating negative budgeted cost of work scheduled (BCWS), without corresponding negative budgeted cost of work performed.

- Contractor mobilization and the installation of roads and pads supporting 200-BP-5 Removal Action Work Plan (RAWP) well drilling activities planned for March were completed ahead of schedule in a previous fiscal period. Performance earned for drilling progress in March was not enough to offset the current period BCWS associated with the work performed early.
- Contractor mobilization and the installation of roads and pads supporting the 100-FR-3 Remedial Design Report (RDR)/RAWP well drilling campaign has been delayed due to extended cultural and ecological resource review (CRR), which is taking much longer than planned because one of the wells was within a culturally sensitive area and may have required a Memorandum of Agreement with the Tribes. The schedule for the CRR has slipped as CHPRC and MSA determine acceptable alternative well locations.
- Routine groundwater sample collection remains behind schedule as a result of excessive work delays, early releases, and facility closures due to adverse weather conditions on the Hanford Site in both February and March. Although overtime shifts have been authorized and performed in March, crews have not yet been able to fully recover the schedule. Complete recovery is expected by the end of the fiscal year.
- Technical Integration experienced a delay in planned work as the Composite Analysis team continued to work on the recovery task (in-scope unplanned) in response to a revised Central Plateau Vadose Zone Geoframework and necessary updates to the Hanford Site Disposition Baseline, causing a delay in performance of the Vadose Zone Fate and Transport activities. CIE execution activities did not start in March as planned due to a delay in subcontract award resulting from ongoing subcontract negotiations.

CM Cost Performance (-$2.3M/-35.6%)
The primary driver of the current period positive cost variance is the March 2019 implementation of BCR-PRC-19-012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the PMB from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REA), through September 30, 2019, as documented in PRC Modification 684, dated January 9, 2019. The baseline change request (BCR) incorporated the negotiated budget values for Change Order 299, *Additional MBR Cassettes,* Change Order 318, *Characterize 200-WA-1/200-BC-1 OUs*, and Change Proposal 041 306 1595, *ERDF Operations*. Implementation of this BCR required a one-time adjustment to the project to reflect the agreed values of the identified change orders whose costs were incurred in prior periods and generated a $4 million negative cost variance.

Other significant drivers to current period cost performance include:

- Technical Integration required more subcontract support than planned to continue progress of in-scope unplanned activities supporting completion of the Composite Analysis and to address the RL comments on the Cumulative Impact Evaluation Technical Approach Document chapters that have been submitted.
- 100-KR-4 and 100-HR-3 well realignment final design established the final well locations much closer than assumed in the baseline, requiring less materials and subcontract construction labor for laying pipe and cable, and building road crossings than the baseline assumed. Additionally the project was able to re-use existing materials for well racks instead of purchasing all new, resulting in cost savings.
- Effective maintenance and successful upgrades to 100K and 200-ZP-1 P&T facilities in prior years have decreased overall operations and preventative and corrective maintenance activities, requiring

less material and subcontract support than was planned, and allowing operations staff to support other projects.

- 100-HR-3 drilling campaign implemented a more efficient methodology for drilling, eliminating the need for core drilling resulting in cost savings.
- M-24-00 drilling campaign awarded the drilling subcontract to lowest bidder, which came in less than the planned value which had been based on historical actuals.
- Well maintenance required less roads and grounds maintenance than planned in the level of effort account, which is anticipated to increase in effort in the spring and summer.
- The final design of the hypochlorite injection system at the 200-ZP-1 P&T was much simpler than assumed when the baseline was established without formal design, eliminating the need for some activities and significantly reducing the effort required to complete installation.

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)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,576.9	1,576.7	1,522.6	(0.2)	-0.0%	54.1	3.4%	1,645.0	1,586.0	63.4	59.0

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance (-$0.2M/-0.0%)
The contract to date negative schedule variance is within reporting thresholds.

CTD Cost Performance (+$54.1M/+3.4%)
The contract to date positive cost variance is within reporting thresholds.
Variance at Completion (+$59.0M/+3.6%)
The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

RL-0030 Soil and Groundwater Remediation	FY2019 Projected Funding	FY2019 Spending Forecast	FY2019 Variance
Spending Forecast	132.9	117.8	15.2
Incremental Scope Change Pending Change Management	0.0	0.4	(0.4)
RL-0030 - Total	132.9	118.1	14.8

Numbers are rounded to the nearest $0.1 million

Funds/Variance Analysis
The FY2019 projected funding for project breakdown structure (PBS) RL-0030 is $132.9 million. The FY spending forecast of $117.8 million reflects the incorporation of the cost savings identified in the CM cost analysis and associated forecast of their impact at FY end and other S&GW Project efficiency initiatives. FY2019 funding aligns with the RL Integrated Priority List.

Critical Path Schedule
Critical path analysis will be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0030 Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) enforceable milestones, non-enforceable target due dates, and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
Milestones on Schedule					
M-015-21A	Submit 200 BP-5 & 200 PO-1 OU FS Report and PP(s) to Ecology	3/31/2019		3/30/2019	On Schedule
M-024-58L	Initiate Discussions of Well Commitments	6/1/2019		6/1/2019	On Schedule
M-024-70-T01	Conclude Discussions of Well Commitments Initiated Under M-024-58	8/1/2019		8/1/2019	On Schedule
Milestones at Risk					
M-015-93C	Initiate Characterization Field Work for 200-SW-2 Operable Unit Landfills	9/30/2018		TBD	Dispute resolution initiated on July 9, 2018 (18-AMRP-0135).

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-015-98	Complete Remedial Investigation of U Plant Related Waste Sites Located in 200-WA-1	6/30/2019		TBD	At Risk. Work not funded in FY2019 (19-AMRP-0056).
M-085-70	Submit to Ecology a Remedial Investigation/Feasibility Study WP for 200-CB-1	9/30/2019		TBD	At Risk. Work not funded in FY2019.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review Decisional Draft Rev 1 200-UP-1 Remedial Design/Remedial Action Work Plan (RD/RAWP)	10/1/2018 (A)	4/25/2019
RL Review of 100-NR-2 Remedial Investigation/Feasibility Study Decisional Draft B	3/4/2019 (A)	6/28/2019
RL Review of Decisional Draft Biomobilization/Biointrusion Sampling Analysis Plan (SAP)	3/7/2019 (A)	5/1/2019
RL Review 200-BP-5 SAP Draft A	12/15/2018 (A)	4/4/2019
RL Review CIE Approach Document Chapters 5 and 6	3/18/2019 (A)	4/3/2019
RL Transmit 200-UP-1 Performance Monitoring Plan (PMP) Rev 1 Draft A to Regulators for Review	03/25/2019	04/07/2019
RL Transmit 100-NR Biovent Characterization Final Area of Potential Effects to State Historic Preservation Office/Tribes	03/27/2019	03/28/2019
RL Transmit 200-BP-5 Proposed Plan Draft A to Regulators for Review	03/27/2019	03/30/2019
RL Review 100-HR-3 Draft Drilling SAP	03/29/2019	04/27/2019
RL Review 200-BP-5 Groundwater Monitoring Plan Rev 1 Decisional Draft	04/02/2019	05/01/2019
RL Review 300-FF-5 Environmental Calculation File for CY2017 Groundwater Performance Monitoring	04/05/2019	04/17/2019
RL Review 200-DV-1 Treatability Laboratory Test Plan Decisional Draft	04/09/2019	05/08/2019
RL Review 100-KR-4 Explanation of Significant Differences Treatability Laboratory Test	04/10/2019	05/09/2019
RL Transmit 100-KR-4 Remedial Investigation Draft B to EPA for Review	04/12/2019	04/26/2019
RL Review 100-KR-4 Draft Drilling SAP	04/12/2019	05/11/2019
RL Review Annual Groundwater Report Draft A	04/12/2019	05/11/2019
RL Transmit 200-UP-1 RD/RAWP Rev 1 Draft A to EPA	04/16/2019	04/29/2019
RL Review Ringold A DQO/SAP Decisional Draft	04/17/2019	05/06/2019
RL Transmit 200 Area P&T Report PMP Draft A to EPA	04/17/2019	04/30/2019
RL Review 100-KR-4 Feasibility Study Decisional Draft B	04/18/2019	05/17/2019
RL Submit 216-A-37-1 Crib Engineering Evaluation Report Rev 0 to Ecology	04/19/2019	05/02/2019
RL Review 100-BC-5 Proposed Plan Revised Legal/Policy Text	04/22/2019	04/25/2019

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review 100-KR-4 Soil Flushing SAP	04/22/2019	05/2/2019
RL Attend the 216-B-3 Pond Review Addendum Workshop	04/22/2019	05/2/2019
RL Transmit 216-A-29 Ditch Engineering Evaluation Report Rev 0 to Ecology	05/01/2019	05/14/2019
RL Review the Final Closeout Forms associated with the 100-HR-3 RD/RAWP	05/06/2019	06/03/2019
RL Review Draft Infiltration Pond Evaluation Report	05/07/2019	06/05/2019
RL Transmit 200-BP-5 Proposed Plan Draft A to Regulators For Review	05/07/2019	05/10/2019
RL Transmit 216-B-3 Pond Engineering Evaluation Report Rev. 0 to Ecology	05/07/2019	05/20/2019

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

CH2MHILL
Plateau Remediation Company

T.E. Bratvold
Vice President for
Central Plateau Risk
Management Project

M. A. Wright
Vice President for
Project Technical
Services

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Severe weather in March negatively impacted performance for a number of Central Plateau Risk Management (CPRM) projects and maintenance activities. The Plutonium Uranium Extraction Plant (PUREX) Tunnel 2 stabilization efforts were placed on hold due to the severe weather allowing only two weeks of grout placement in the reporting period. The grout contractor was directed to stand down until daytime temperatures reached above freezing. The Reduction-Oxidation Plant (REDOX) waste cleanout was impacted as snow accumulation prevented waste load out to Environment Restoration Disposal Facility (ERDF) containers. Snow accumulation also prevented field walk downs necessary for the REDOX road, trailer, and ventilation procurements. Demolition preparation activities for 242-B/BL and removal of the 200 Area steam lines were also impacted as snow prevented accessibility to site locations.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
19-EMS-CPRM-OBJ-P1	Increase Environmental Management System (EMS) awareness	Present or facilitate a discussion of EMS topics to personnel on a minimum of four different occasions in FY2019 and recruit personnel (other than environmental) to participate in at least two compliance review/programmatic walk downs.	9/30/2019	80%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	3	15	3/4/2019 - Employee went to HPMC due to a painful wrist (they previously had surgery on wrist due to carpal tunnel). HPMC released the employee without restriction. (25100) 3/11/2019 - Employee slipped on a patch of ice while exiting vehicle. Employee was released without restrictions. (25104) 3/13/2019 - Employee stepped off the snow onto a sheet of ice and fell, impacting their right hand on gravel. Employee received a large cut and scrape to the right palm near the thumb, causing it to bleed. HPMC cleaned and bandaged the wound before releasing the employee back to work without restrictions. (25103)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0040 Accomplishments

CPRM Surveillance and Maintenance (S&M)

- Performed annual surveillances at B Plant and 224-B.
- Completed B Plant inspection and lube for exhaust fans EF-101 and& EF-102
- Performed stack sampling at PUREX and delivered samples to the laboratory for analysis.
- Performed electrical investigations at 217-A and 242-B/BL.
- Completed the 200 West Tri-Annual (first of three) Inactive Waste Site Surveillance.
- Performed snow removal activities.

PUREX Tunnel 2 Stabilization Project

Project Technical Services Support

- Grout placement at PUREX Tunnel 2 resumed March 12, 2019, after a five-week halt due to inclement winter weather conditions. Approximately 3,660 cubic yards of grout was placed this month. Fiscal year to date, 34,826 cubic yards of grout has been placed. Grout placement is expected to complete by April 18, 2019.
- Performed snow removal activities to support grouting restart.
- Mobilized 55-meter pump to support grouting at Riser 2 and relocated cameras.
- The last three of 28 tunnel cars were verified covered as of March month end.

PUREX Canyon Mobile Office and Shower Trailers Installation

- Submitted request for proposal for installation of the PUREX mobile trailers and awarded a contract to the vendor.
- Placed orders for the shower trailer and six-wide office trailer with delivery anticipated in May and July.

REDOX Canyon Risk Mitigation

- Completed ground scans and delivered new restroom trailer to provide services while MO-409 lift station repairs are pursued.
- Completed beryllium sample plan and engineering approval for cover plate access in the sixth floor silo.
- Removed last beryllium waste to staged ERDF container.
- Completed access road contract award and walked down site with contractor.
- Completed initial cold and dark electrical walk downs of below grade area of REDOX.
- Completed electrical walk down and lockout/tagout to be used as defense in depth to support sample gallery standing water sampling.
- Revised and released work change notice (WCN) to allow size reduction of waste for low risk contamination areas.
- Commenced size reduction of equipment outside of the 202-S Facility.
- Received new radiological work permit (RWP) for entry into the sixth and seventh floor of the REDOX silo due to voiding limits.
- Completed facility walk downs on the south side of the building to determine water intrusion and create dams to route water away from ingress/egress points.
- Completed draft analysis for beneficial use of REDOX sodium hydroxide product to be drained from tanks 604 and 508.
- Received 50 additional tagged and tested powered air purifying respirator (PAPR) units from the Hanford Fire Department.
- Initiated entry into crane way platform (sixth floor) REDOX silo.

242-B/BL Demo Preparation
- Completed initial entry assessments.
- Completed electrical cold and dark work package.
- Completed mobile trailer installation work package.

Steam Line Removal
- Completed glove bag install and asbestos abatement in REDOX Zone 2
- Completed initial abatement of four crossovers in 200 East near B Plant.

MAJOR ISSUES

Issue
On January 11, 2018, the State of Washington, Department of Ecology (Ecology) Nuclear Waste Program performed a Dangerous Waste Compliance Inspection at B Plant. During their review of the "2017 B Plant Complex Annual Surveillance Issue List," it was noted in the B Plant 221-B "Issue" column, "White residue on the floor (not new)." In addition, the "issue" column also noted "Expansion joint crack, white residue on floor." As a result of these observations, Ecology has requested that within 90 days upon receipt of the compliance report, designation results of the white residue on the floor of the canyon building, 221-B pipe, and operating gallery be submitted.

Corrective Action
RL and CH2MHILL Plateau Remediation Company (CHPRC), with legal representation, have met to establish a path forward.

1. Perform a records search to determine when the white powder was first identified.
2. During upcoming entries, as part of the annual surveillance, data (photos and description of surroundings) will be obtained and evaluated to determine if it is sufficient to support designation based on process knowledge.
3. Actual cost information associated with sampling and analysis of the white powder at PUREX will be used to develop a cost estimate for sampling and analysis of the white powder at B Plant.
4. The PUREX Sample Analysis Plan (SAP) will be revised to support sampling and analysis of the white powder in the event that it is determined as part of item number two that process knowledge is not sufficient to support designation.
5. If sampling is required to support designation, CHPRC will determine if designation can be accomplished in the required 90-day period and notify RL if an extension is needed.

Status
CHPRC has received contracting officer direction to remedy environmental and regulatory documents. The initial cost and schedule estimate indicates the committed May cleanup date does not appear achievable at this time based on delays in preparing and approving the environmental documents. RL has indicated that although the May deadline for cleanup will not be met, the powder will be cleaned up within FY2019.

In addition, a waste designation was provided to RL for the B Plant white residues. CHPRC provided clarification to Ecology that although substance does contain lead, it is not considered hazardous waste.

Issue
On September 25, 2018, an entry into the REDOX canyon was performed for the first time since 1997. During the entry, significant combustible loading (liquid and solid) was discovered throughout the canyon.

Corrective Action
Fire Protection Engineering will evaluate as-found condition against National Fire Protection Association (NFPA) requirements for combustible material loading. Fire Protection Engineering determined the hazardous combustible materials required packaging and removal from the REDOX canyon in order to comply with current NFPA standards.

Status
Entries into the REDOX Canyon have been performed and more hazardous combustible material has been discovered. Waste load out has been initiated and work package for sampling of liquid hazardous material is complete. A cost and schedule addendum to the FY2019 change proposal was submitted in January 2019. There is a high likelihood of further discoveries of combustible material in the east end of the canyon once further entries are performed.

Issue
Over the past six months, the rate of liquid accumulation in the PUREX deep bed filter condensate tank (V11-10-1) has exceeded historical trends. Significant liquid accumulation in this tank indicates water intrusion through the deep bed filter structure. Water intrusion to the deep bed filter structure poses at least three risks: radiological contamination spread, wetting of filter media, and structure erosion.

Corrective Action
Structural integrity analysis to be performed as part of determining remediation path alternatives to water intrusion.

Status
Structural integrity analysis is ongoing, continuing to track water level in catch tank (current water level tracking consistent with rainfall).

Issue
In November, the project realized a loss of all but three Decontamination & Decommission (D&D) workers due to hiring by Washington River Protection Solutions, LLC (WRPS), another Hanford contractor. Additional losses are expected in FY2019 based on WRPS staffing projections for nuclear chemical operator (NCO) positions.

Corrective Action
In response to the loss of staff, 17 D&D workers were hired and began training on December 3, 2018.

Status
Additional D&D workers were hired at CHPRC and are proceeding through training. The final wave of losses (10 D&D workers) is expected in May. Due to hiring additional D&D workers in anticipation of further hiring at WRPS, the impact from losing 10 more workers in May will be minimal.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0040/WBS-040				
Explanation of major changes to the project monthly stoplight chart: Risks REDOX-01, *Resource Availability*, REDOX-02, *Inclement Weather*, REDOX-06, *Impacted by OHC (Other Hanford Contractors) or Other CHPRC Projects*, REDOX-07, *Building Accessibility due to Water Intrusion*, REDOX-08, *Regulatory Documents Delayed*, and REDOX-12, *Unexpected Discovery – Combustibles*, were added to the stoplight chart as realized risks in the month of March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
PRXT-S2-004: Design Maturity	Inadequate design results in changes to the construction subcontractors, resulting in cost and schedule impacts. **Risk Handling Strategy:** Control **Probability:** Very Low (<10%) **Worst Case Impacts:** $0, 16 day			**Risk Event:** Design assumed the six identified injection points to be sufficient. Due to equipment placement, the grout is not able to flow as anticipated. **Risk Recovery action(s)** / **FC Date** / **%** Work 5/10 shift to accelerate schedule. / Ongoing / N/A Use of overtime before and after shift. / Ongoing / N/A Fabricate and install 10 new injection points. / Complete / 100 **Risk Action Assessment:** No major changes in March. Implementation of the topping off plan was achieved in January, as the insertion devices were installed and grout placement successfully resumed. The "topping off plan" required the grout contractor to fabricate and install insertion devices for 10 new injection points on the PUREX Tunnel and place grout via the pumper truck for the last phase of grout placement. Additionally, two PTZ70 cameras were purchased and installed in new risers.
PRXT-S2-010: Inclement Weather	Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will result in in-scope unplanned work and result in schedule impacts to the project. **Risk Handling Strategy:** Control **Probability:** Low (10% to 25%) **Worst Case Impacts:** $0, 68 day			**Risk Event:** The work was assumed to be performed in fall weather conditions per the contract with the grouting contractor. **Risk Recovery action(s)** / **FC Date** / **%** Purchase freeze protection equipment. / Complete / 100 Drain booms after each shift. / Ongoing / N/A Running extension boom heater off shift. / Ongoing / N/A Renegotiate unit rate with contractor for grout placement. / Complete / 100 Negotiate cost impacts to grout contractor for inclement weather delays. / May 2019 / 0 **Risk Action Assessment:** No major changes in March. To mitigate potential bad weather, grout placement has been working a 5/10 schedule. Additionally, the project team and grout contractor worked with facility support (RADCON) in order to perform startup and shut down sequence of activities as efficiently as possible, thus maximizing the hours available to grout during shift. CHPRC procurement and the grout contractor renegotiated the unit rate for grout placement after December 9, 2018. The contract change was initiated to incorporate impacts for cold weather grout placement and redefine standby/conveyance system maintenance usage and rates in an attempt to minimize stand down/delay time change orders but still incentivize the contractor to complete as quickly as possible. Due to adverse winter weather conditions, the grout placement was put on a temporary hold from February 4 through March 11, 2019. CHPRC project management and the grout contractor proactively worked to mitigate cost impacts, which included layoffs of drivers and cancellation of some equipment rentals. The stand down time is estimated at 23 working days. The final cost impact remains to be negotiated with CHPRC procurement.

<table>
<tr><th>Risk Title</th><th>Unmitigated Risk Impacts</th><th colspan="2">Assessment
Month | Trend</th><th>Comments</th></tr>
<tr><td colspan="5">RL-0040/WBS-040</td></tr>
<tr><td>REDOX-01: Resource Availability</td><td>Other higher CHPRC priority work results in reallocation of resources, Improving job markets, in addition to other factors, result in competition for key resources. In addition higher than anticipated attrition impacts project cost.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $90K, 48 day</td><td>  </td><td>  </td><td>Risk Event: Other Hanford Contractors and higher CHPRC priority work has impacted the resource availability for REDOX. Other Hanford contractors impacted work through the labor asset management program (LAMP) taking skilled and trained D&D workers.

<table><tr><th>Risk Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Identify and hire temporary employees (D&D, asbestos workers, RCTs) early in the fiscal year.</td><td>Complete</td><td>100</td></tr><tr><td>Meet with other CHPRC projects in attempts to spread resources appropriately between projects.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conduct ongoing FTE analyses to ensure staffing is adequate.</td><td>Ongoing</td><td>N/A</td></tr></table>
Risk Action Assessment: D&D workers were hired in late January and completed the required training at HAMMER. Currently, the D&D workers are field training while remaining requirements such as chest counts, are being conducted. This will allow D&D workers entry access in radiological areas within REDOX to work on field activities.</td></tr>
<tr><td>REDOX-02: Inclement Weather</td><td>Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will result in in-scope unplanned work and result in schedule impacts to the project.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $0K, 4 day</td><td>  </td><td>  </td><td>Risk Event: During high temperatures times during summer months, temperatures inside the facility reach levels that would not allow safe entry for personnel dressed in PPE. This would result in schedule impacts.

<table><tr><th>Risk Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Implement work rest regimen and switch shifts as applicable to avoid the worst of the potential weather impacts/delays.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Utilize overtime to recover from schedule delays due to weather events.</td><td>Ongoing</td><td>N/A</td></tr></table>
Risk Action Assessment: Work rest regimen would be implemented and more labor intensive work activities would be scheduled in the cooler parts of the day lower the risk of heat exhaustion and heat stroke for workers inside the facility.</td></tr>
<tr><td>REDOX-06: Impacted by OHC (Other Hanford Contractors) or Other CHPRC Projects</td><td>Delays by Other Hanford Contractors (OHCs), or other CHPRC projects impacts the schedule and technical approach due to inconsistences with CHPRC execution, resulting in recovery actions, causing unplanned, in-scope work and impacting the schedule.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $100K, 24 day</td><td>  </td><td>  </td><td>Risk Event: Impacts from other Hanford contractor would impact the ability for work to progress at REDOX due to conflicts with close neighbors (222-S Labs).

<table><tr><th>Risk Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Communication plan and outreach efforts will be developed and executed throughout the project.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Establish north side road parking lot and trailer access to avoid interferences with MSA and WRPS work to the south.</td><td>July 2019</td><td>35%</td></tr></table>
Risk Action Assessment: Construction of an access road connecting the north side of REDOX to Beloit Ave will reduce the interaction between REDOX and 222-S Labs. Additionally, a four-wide trailer is in the processed of being procured to move personnel from MO409 to the north side of REDOX, reducing the amount of personnel interacting with 222-S Labs.</td></tr>
<tr><td>REDOX-07: Building Accessibility due to Water Intrusion</td><td>Extensive leaks are experienced in the galleries due to the current state of the Annex areas and silo roof, resulting in schedule delays to the project.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $0K, 32 day</td><td>  </td><td>  </td><td>Risk Event: Leaking roofs have allowed water to accumulate in areas of the facility that prohibits personnel in certain areas of the building. Due to electrical concerns, personnel at REDOX has not been able to access the west end of the North Sample Gallery.

<table><tr><th>Risk Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Spray roof with engineered roofing sealant prior to the rainy season, in an effort to minimize leaks.</td><td>June 2019</td><td>0</td></tr><tr><td>Patch existing roof vulnerabilities.</td><td>June 2019</td><td>0</td></tr></table>
Risk Action Assessment: Work plans involving the electricians to enter the North Sample Gallery to collect samples of the water that has accumulated are underway. Work packages are being modified and hazard identification are being worked to address the water in the west end of the North Sample Gallery.</td></tr>
</table>

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0040/WBS-040				
REDOX-08: Regulatory Documents Delayed	Regulatory documents, specifically the Removal Action Work Plan (RAWP) and the Sample Analysis Plan (SAP) that grant authorization for deactivation and decommissioning activities within 202-S REDOX, are delayed resulting in loss in schedule and cost. **Risk Handling Strategy:** Control **Probability:** Likely (75% to 90%) **Worst Case Impacts:** $0K, 48 day			**Risk Event:** Regulatory documents (RAWP and the SAP) have been delayed resulting in schedule impacts because demolition preparations activities would not start. A significant amount of unexpected liquids was discovered in Tank 604 in the silo. The delay in regulatory documents would delay the ability to drain and dispose of the liquid. **Risk Recovery action(s)** / **FC Date** / **%** Work closely with the appropriate organizations responsible for managing the development of the various regulatory documents to ensure the documents are scheduled to be developed sufficiently early to obtain needed DOE or regulator approvals prior to planned start of work. — Ongoing — N/A Establish routine status meetings with these organizations to provide early warning if documents are being delayed in order to help develop acceptable work-arounds in order to minimize the schedule impact. — Ongoing — N/A **Risk Action Assessment:** Ongoing interfaces and meetings with DOE to discuss the status of the RAWP and the SAP are taken place so all interested parties understand the consequences of delayed regulatory documents.
REDOX-11: Unexpected Discovery - Hazmat	Unexpected or late discovery of hazardous material is discovered during deactivation and decommissioning of 202-S REDOX. **Risk Handling Strategy:** Control **Probability:** Likely (75% to 90%) **Worst Case Impacts:** $11K, 48 day			**Risk Event:** During D&D activities, there is an unexpected discovery of hazardous material. **Risk Recovery action(s)** / **FC Date** / **%** Perform investigative entries into silo, NSG, and canyon. — Ongoing — N/A Characterization in progress. — Ongoing — N/A Innovative methods (i.e. robots) to further understand conditions. — Ongoing — N/A **Risk Action Assessment:** No major changes in March. Investigative entries and characterizations are furthering the understanding of the current conditions of REDOX.
REDOX-12: Unexpected Discovery - Combustibles	Unexpected discovery of solid form combustibles at REDOX will result in immediate recovery actions causing unplanned in-scope work (e.g. unplanned facility repairs), causing cost and schedule impacts to the project. **Risk Handling Strategy:** Control **Probability:** Likely (75% to 90%) **Worst Case Impacts:** $6K, 48 day			**Risk Event:** As found conditions in canyon entries and other parts of the facility that have not been accessed in several years resulted in a large amount of combustibles that without action would be out of compliance. **Risk Recovery action(s)** / **FC Date** / **%** Ensure that safety management programs and procedures adequately control combustible findings. — Ongoing — N/A Work with engineering to identify containment barriers. — Ongoing — N/A Utilize ventilated containment tents. — Ongoing — N/A Partner with fire protection to evaluate discovered combustible loading against requirements. — Ongoing — 30% **Risk Action Assessment:** A BCR has been implemented to focus work within REDOX to remove combustibles and return REDOX to a compliant state.
REDOX-16: Facility Integrity	Problems with aging building systems/components (e.g. roofing/structures, etc.) result in inoperability or requires unscheduled maintenance/outages impacting planned D&D activities resulting in schedule delays and cost impacts. **Risk Handling Strategy:** Transfer **Probability:** Medium (26% to 74%) **Worst Case Impacts:** $0, 0 day			**Risk Event:** Leaking roof results in unsafe working conditions for personnel. **Risk Recovery action(s)** / **FC Date** / **%** Perform cold and dark activities to shut off building power. — Sep 2019 — 35 Repair minor roof defects. — May 2019 — N/A **Risk Action Assessment:** No major changes in March. Integrity failures could lead to water issues within radiological contaminated areas causing a hazard to personnel. Going cold and dark will minimize the risk for electrical shock due to water. Making minor repairs to leaking parts of the roof can significantly reduce water intrusion.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0040/WBS-040</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td>REDOX-05: Collapse of Sand Filter</td><td>Due to the close proximity of equipment driving by (cranes, forklifts for waste loadout, steam lines), age, and structural integrity, the project experiences a collapse of a sand filter, resulting in cost and schedule impacts to the project.

Risk Handling Strategy: Control

Probability: Very Low (<10%)
Worst Case Impacts: $260K, 48 day</td><td>  </td><td>  </td><td>Risk Triggers: Due to the close proximity of equipment driving by (cranes, forklifts for waste loadout, steam lines), age, and structural integrity, the project experiences a collapse of a sand filter.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Establish project boundary.</td><td>June 2019</td><td>50%</td></tr><tr><td>Use bracing when digging.</td><td>Not yet digging</td><td>N/A</td></tr><tr><td>Implement communication plan between other Hanford contractor and other CHPRC projects.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Engineering to conduct structural integrity and equipment stand-off evaluations.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Follow the critical lift process, and hoisting and rigging manual.</td><td>Ongoing</td><td>NA</td></tr></table>
Mitigation Assessment: No major changes in March. The project is working to ensure that the steam line removal efforts consider sand filters while planning. The project has been in communication with the 222-S Labs about future work scope at REDOX. Engineering has also been involved in structural evaluations of the sand filters. These evaluations will be used for establishing an equipment stand-off distance. Additionally, discussions for the initial planning of the critical lift process has started.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td colspan="5">No high risk threat value risks in March.</td></tr>
<tr><td colspan="5">FY2019 Risk Triggers (Risk could be realized in FY2019)</td></tr>
<tr><td>PRXT-S2-009: Resources Unavailable</td><td>Other higher CHPRC priority work results in reallocation of resources, improving job markets, funding uncertainties, or bump and roll result in competition for key resources. In addition, higher than anticipated attrition impacts project cost.

Risk Handling Strategy: Accept

Probability: Low (10% to 25%)
Worst Case Impacts: $102K, 64 day</td><td>  </td><td>  </td><td>Risk Triggers: Due to the current job market, in addition to the need for specialized resources to complete the planned PUREX stabilization activities, qualified and trained resources are needed to support planned activities.

<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Conduct full time equivalent personnel analysis and identify corrective actions to ensure adequate resource profiles.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment:
No major changes in March. The project has hired D&D workers in anticipation of another 25 NCO openings at WRPS in second quarter FY2019.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified risks/opportunities)</td></tr>
<tr><td colspan="5">No unassigned risks identified in March.</td></tr>
</table>

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	5.7	3.3	4.8	(2.4)	-41.3%	(1.5)	-44.0%

Numbers are rounded to the nearest $0.1 million

CM Schedule Performance: (-$2.4M/-41.3%)

The current month negative schedule variance is primarily due the adverse winter weather conditions experienced in the month. Grout placement activities at Tunnel 2 were put on hold from February 4 through March 11, 2019. Snow build up prevented waste load out into ERDF containers. Equipment surveys were also impacted because of the cold weather; crews could not open doors for ventilation to remove radon from the building in the 202-S Facility. Additionally, field walk-downs for the haul road,

trailer, and ventilation procurements were halted due to snow and ice accumulation. Finally, the removal of the 200 West steam lines experienced delays due to accessibility to work areas requiring snow clearance, exterior freezing temperatures not conducive to water application for glove bag abatement, and heavy equipment operators working higher priority snow removal on the Hanford Site. The weather cleared and allowed for steam line removal work to continue the final two weeks of March.

CM Cost Performance: (-$1.5M/-44.0%)
The current month negative cost variance resulted from the March 2019 implementation of BCR-PRC-19-012R0, *Mod 684- Implement Global Settlement*, which incorporated the impacts to the PMB from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REAs), through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019. Implementation of this baseline change request (BCR) resulted in a one-time adjustment to the current period budget for work that had been planned in prior years that was modified by the agreement. Implementation of this BCR required a one-time adjustment to this control account in the current period to reflect the agreed values of the impacted scope. This adjustment caused negative current period BCWS with corresponding negative current period BCWP.

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)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	526.8	525.9	501.5	(0.9)	-0.2%	24.5	4.6%	554.9	534.1	32.6	20.8

Numbers are rounded to the nearest $0.1 million

Contract to Date (CTD) Schedule Performance: (-$0.9M/-0.2%)
The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+$24.5M/+4.6%)
The CTD cost variance is within reporting thresholds.

Variance at Completion (+$20.8M/+3.7%)
The variance at completion (VAC) is within reporting thresholds.

Contract performance report formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

WBS 040/RL-0040 Nuclear Facility D&D	FY2019 Projected Funding	FY2019 Spending Forecast	FY2019 Variance
RL-0040 Spending Forecast	81.8	71.1	10.7
Incremental Scope Pending Change Management	0.0	2.7	(2.7)
RL-0040 – Total	81.8	73.8	8.0

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis
FY2019 funding for project breakdown structure (PBS) RL-0040 is $81.8 million. FY2019 funding aligns with the RL Integrated Priority List (IPL). The variance primarily reflects the work scope included in the IPL that is pending authorization.

Critical Path Schedule
Critical path analysis can be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0040 Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) enforceable milestones, non-enforceable target due dates, and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-250D	Submit to Ecology a 3-Year Rolling Prioritized Schedule to Implement Waste Site Removal Actions.	3/31/2019		3/27/2019	To be completed by 3/27/2019
M-016-256	Complete Removal of All Waste Sites for FY2019 as Updated/Modified in M-16-17-01.	9/30/2019		TBD	In negotiation with RL to adjust schedule to FY2020. Currently in dispute resolution.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
224-B (B Plant) Removal Action Work Plan (RAWP) (2017-34) RL Review	8/16/2017 (A)	5/30/2019
202-A PUREX (2016-15) Draft B Engineering Evaluation/Cost Analysis (EE/CA) Ecology Review	12/11/2017 (A)	4/30/2019
REDOX RAWP (2017-06) Revision 0 Complete	3/15/2018 (A)	4/30/2019
REDOX Sampling Analysis Plan (SAP) (2017-05) Revision 0 Complete	4/11/2018 (A)	4/30/2019
Tier 2 Misc. (B Plant North) SAP (2017-47) Revision 0 Complete	4/17/2018 (A)	4/30/2019
Tier 2 Misc. Fac. (B Plant North) RAWP (2016-50) Revision 0 Complete	5/2/2018 (A)	3/27/2019

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

CH2MHILL
Plateau Remediation Company

R. M. Geimer
Vice President for
K Basin Operations

T. L. Hobbes
Vice President for
River Risk Management Project

M. A. Wright
Vice President for
Project Technical Services

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

K Basin Operations (KBO):
The 100K Closure remediation team continued excavation and load out of soil from the east trench and started demolition and load out of concrete piping from the west trench of Waste Site 100-K-47:1 and conducted soil sampling at Waste Site 116-KE-2. The 100K Closure basin characterization team completed settled solids sampling of the basin floors and received RL approval of the CHPRC request to terminate/cease safeguards for the Attractiveness Level E accountable nuclear material (found fuel specimens) in K West Basin. The 100K Closure Interim Safe Storage (ISS) team completed development of a request for proposal (RFP) for the KE Reactor Building asbestos removal contract and released the RFP for bid.

River Risk Management Project (RRMP):
Progress continued on work required to remediate the 300-296 Waste Site beneath the 324 Building. Crews at the 324 Building completed the final core drill location required for the installation of the remote soil excavation operations (RSEO) equipment and initiated the installation of the pilot holes in the basement in support of structural modification.

In the 324 Building's hot cells:

- Completed grouting of waste containers for A Cell grout containers.
- Completed the installation of five of six tool holders for the remote excavator arm (REA) implements, allowing the mobilization and use of additional implements for debris stockpiling.
- Initiated internal cell sealing and mobilizing the snorkel for installation.
- D Cell workers were able to break the seal in the floor to allow bin access between C and D Cells for waste bin movement during RSEO.
- At the 324 Building mockup, crews began the floor saw testing and continued the radiological assay system testing prior to installing at 324 Building.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
19-EMS-RRMP-OBJ1-P1	Increase Environmental Management System (EMS) awareness	Present or facilitate a discussion of EMS topics to 324 Building Disposition Project personnel on a minimum of five different occasions in fiscal year (FY) 2019 and recruit personnel from the 324 Building Disposition Project organizations (other than environmental) to participate in at least five compliance review/programmatic walk downs.	9/30/2019	70%
19-EMS-KBOPR-OBJ1-P1	Improve compliance/pollution and spill prevention	Monitor and evaluate universal waste and recycling accumulation areas for compliance with CHPRC procedures. Survey spill prevention measures.	9/30/2019	48%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	0	31	N/A
Near Misses	1	2	3/19/2019 – An employee attempted to re-enter and stop a vehicle that began to roll away after being parked. Employee fell to ground and rolled clear of vehicle. (25110)

KEY ACCOMPLISHMENTS

K Basin Operations

- 100K Closure Project:
  - Completed 100K Soil Remediation in-process soil sampling at Waste Site 116-KE-2. Expect to receive results in early April.
  - K West Basin Deactivation
    - Completed and approved the facility modification package for the Sand Filter Media Removal System (SFMRS) equipment on March 13, 2019. Completed the design compliance matrix on March 14, 2019.
    - K West Basin Below-Water Debris Characterization
      - Completed settled solids sampling of the basin floors. Nine vacuum sample cells were collected, placed in 5-liter cans, and staged in the operations job box awaiting transportation to the 222S Laboratory.
      - RL approved the CHPRC request to terminate/cease safeguards for the Attractiveness Level E accountable nuclear material (found fuel specimens) in K West Basin. This clears the way for material processing and conditioning to create an underwater check source for the gamma camera. The Transuranic Waste (TRU) Program is preparing the transmittal of the Defense Determination request to RL for review, approval, and forwarding to the Carlsbad Field Office in New Mexico.
      - Completed initial processing unit for remote handled transuranic material (formerly classified as found fuel specimens) mockup training with nuclear chemical operators (NCOs) and radiological control technicians (RCTs) at the Maintenance and Storage Facility (MASF). The NCOs and RCTs provided recommendations to the MASF engineers to improve the process.
    - Completed K East Reactor ISS development of a RFP for the KE Reactor Building asbestos removal contract and released the RFP for bid.

- Ancillary Facility Deactivation and Demolition (D&D)
  - Initiated actions for demolition of 166KE Fuel Storage Basin (Waste Site 130-KE-2).
  - Provided the revision to DOE/RL-2005-26 *Removal Action Work Plan for 105-KE/105-KW Reactor Facilities and Ancillary Facilities* and supporting air monitoring plan for approval.

River Risk Management Project, 324 Building Disposition Project

- Equipment Procurement and Fabrication:
  - Awarded the contract to modify the transfer mechanism for the 324 Building.
  - Completed the factory acceptance test (FAT) for the 324 Water Delivery System.
  - Continued the design and fabrication of the radiological assay system, waste box shielding/waste bins/waste containers, floor saw system, cell dams, and miscellaneous items for the REAs.
- Facility Preparations:
  - Initiated installation of remote operated impact device /seal breaker into D Cell floor plug, and made the electrical connection.
  - Completed seal break.
  - Completed three of four TRU storage area grout cures.
  - Initiated removal of previously installed contaminated camera in B Cell gallery.
  - Completed interference removal for six upper tool holder drill locations.
  - Completed five of six tool holder core drill locations to the B Cell liner. The last location is pending completion of camera removal.
  - Completed upper airlock door limit switch replacement.
  - Initiated cleanout of Geoprobe excavation.
  - Completed waste box shielding installation for A Cell grout container load out.
  - Initiated C Cell internal cell sealing.
- Structural Modifications:
  - Completed scabble mockup demonstration at Apollo facility.
  - Installed jumper seal into D Cell.
  - Initiated drilling first pilot hole.
  - Completed horizontal azimuth drilling and vertical grout injections at Pit 6.
  - Continued grouting horizontal grout injection locations at Pit 6.
- Mockup:
  - Completed monthly preventative maintenance inspections on the roll-up doors and bridge crane.
  - Initiated floor saw testing, including maneuvering, placing, and performing connection of manipulation by operators.
  - Continued construction acceptance testing (CAT) of the radiological assay system, and completed troubleshooting of software issues discovered during CAT.
  - Initiated annual preventative maintenance inspections on the bridge crane.
  - Continued floor saw testing, including maneuvering, placing, and performing connection of manipulation by operators.
  - Continued operator proficiency training on equipment.

Project Technical Support

- Project Delivery completed review of IDF infrastructure upgrades 60 percent design.

MAJOR ISSUES

Issue

A shortage of RCTs, radiation control engineers, radiation control work planners, and radiation control first line managers has hampered 100K Closure Project soil remediation and basin characterization work.

Corrective Action

The project continues to work with Labor Relations and Central Radiation Protection Management to fill needed positions.

Status

The number of RCTs has improved. 100K radiation control has 11 contract RCTs and 5 CHPRC RCTs hired or being hired for 100K Closure. When new hire RCT training has been completed and planned hires are onboard RCT resources will be sufficient to support the project in-progress and planned work.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0041/WBS-041				
Explanation of major changes to the project monthly stoplight chart: Risk, *RCC-300-296-08: 300-296 Failure of Cell Shield Door* has been removed from the realized risk section, as all recovery actions have been completed. Due to the nature of this risk it will maintain a high threat qualitative assessment and be placed under the high risk section. Risk, *RCC-300-296-31: 300-296 Contamination Encountered During Assumption Verification* was realized.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
RCC-300-296-31: 300-296 Contamination Encountered During Assumption Verification.	To validate the assumptions supporting the 324 Building structural modification design, pilot holes will be drilled into the soil beneath the B-Cell to collect necessary data. If data results in contamination levels much higher than assumed, or contamination deeper than assumed, the project will have to develop an alternative approach, requiring development and/or fabrication of additional equipment, and limit progress on alternate fieldwork activities to recover. **Risk Handling Strategy:** Accept **Probability:** Likely (75% to 90%) **Worst Case Impacts:** $3,318K, 256 Days			**Risk Trigger Metric:** While Performing micropile installations associated with structural modifications, the project encounters increased radiological contamination, chemical contamination, or geo-probes not located where planned, resulting in schedule delays to increased costs. **Mitigation action(s)** / **FC Date** / **%** ALARA Review (IPAR) Evaluations / TBD / N/A **Mitigation Assessment:** In March, unexpected contamination was found within Room 18 during pilot hole drilling activities. In process, ALARA Review (IPAR) evaluations for process improvements are ongoing and planned to be completed within the upcoming period. Monitoring of this risk will continue until the risk no longer poses a threat to the project.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0041/WBS-041</td></tr>
<tr><td>RCC-300-296-30: 300-296 Design Changes Result in Increased Subcontractor Change Order(s) / Claims</td><td>Structural modifications estimate is currently based on the vendor's estimate as of the 30 percent design. The 60 percent design through initiation of 90 percent design and testing of the currently identified 324 Building structural modifications to support design are ongoing. Due to the uncertainty and evolution of developments, design changes may be required upon completion of all design phases.

Risk Handling Strategy: Control

Probability: Very Likely (>90%)
Worst Case Impacts: $3,318K, 136 days</td><td>  </td><td>  </td><td>Risk Event: Upon review of the 30 percent design submittal, it was determined that the cell wall loading/limitations were inadequate and required additional clarification. To reduce the potential impacts associated with conflicting drawing information, applicable design efforts were updated to encompass further analysis of cell footings, load limitations, and field demonstrations to ensure safe and successful completion.

<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Contractor prepare and submit structure modification design - 30%-60% (VE2810)</td><td>8/15/2018</td><td>100</td></tr><tr><td>Perform Micropile Demonstration and Verification to Support Structural Mod Design (VS1220A)</td><td>1/24/2019</td><td>100</td></tr><tr><td>Structural Mods Design Micro-Pile Comment Resolution (VS1220C)</td><td>4/30/2019</td><td>94</td></tr><tr><td>Perform Pilot Holing for Structural Mods (VS5010)</td><td>4/4/2019</td><td>25</td></tr><tr><td>Perform Pit 6 Soil Verification Testing / Geotech (VS1220B)</td><td>4/23/2019</td><td>80</td></tr><tr><td>Contractor prepare and submit structure modification design (VN1220)</td><td>7/15/2019</td><td>87</td></tr></table>
Recovery Assessment: No major changes in March. Delays for completing the final structural design have been incurred due to an extended review period from the independent subject matter experts (SME) coupled with CHPRC internal review.
Additional efforts through progressing on the final design activities have been incorporated into the field execution schedule, along with the estimate to complete to reflect impacts of risk being realized.</td></tr>
<tr><td>RCC-300-296-03: Mockup Testing and Qualification of Remote Equipment/ Process Identifies Major Modification Requirements</td><td>Issues such as equipment interferences, differing as-found conditions than planned, equipment reliability, etc., arise prior to/during mockup testing, leading to re-design of equipment and resulting in cost and schedule delays.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $773K, 80 Days</td><td>  </td><td>  </td><td>Risk Event: During vendor FAT and/or mockup testing, issues and conditions were identified with mockup equipment, resulting in additional redesign, materials, and/or fabrication efforts greater than planned. Remote equipment procurements that have resulted in cost and/or schedule impacts include the REA system components (through supports and dummy post assemblies) and transfer mechanism (electrical components).

<table><tr><th>Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Install Radiological Assay System and perform CAT at Mockup</td><td>3/14/2019</td><td>100</td></tr><tr><td>Install Floor Saw and Support System at Mockup (VN1020)</td><td>4/16/2019</td><td>10</td></tr></table>
Recovery Assessment: During March, vendor assisted troubleshooting (electrical interface) was necessary to complete the Radiological Assay System, CAT. The floor saw installation initiated in March and is planned to be completed in the upcoming period. Once installed, successful integration with remotely operated equipment, through testing and training at the mockup, will continue with preparations for 324 Building equipment. Impacts continue to be incorporated into the project schedule, along with the ETC, to reflect further impacts of risk being realized.</td></tr>
<tr><td>100K-KWB-102: KW Basin – Resources Unavailable</td><td>Other higher CHPRC priority work results in reallocation of key resources (Rad planners, RCTs, Industrial Hygienist, and Nuclear Chemical Operators), which results in cost and schedule delays as projects compete for key CHRPC resources.

Risk Handling Strategy: Accept

Probability: Low (10% to 25%)
Worst Case Impacts: $15K, 16 Days</td><td>  </td><td>  </td><td>Risk Event: 100K Closure Project soil remediation and basin characterization work is experiencing a shortage of RCTs, radiation control engineers, radiation control work planners, and radiation control first line managers.

<table><tr><th>Recovery action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>RADCON and Labor Relations have hired two rad engineers/planners and transferred a RADCON first line manager (experienced in soil remediation and D&D) to 100K. RADCON has also staffed up to 37 RCTs and is in the process of hiring an additional three RCTs, which will provide sufficient resources to cover 100K Closure, 100K Operations, and 100K MinSafe work.</td><td>4/25/2019</td><td>75</td></tr></table>
Recovery Assessment: No major changes in March. The number of RCTs at 100K is sufficient to perform planned 100K closure work in FY2019 when required training has been completed in late April.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td colspan="5">No critical risks identified in March.</td></tr>
</table>

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<tr><th>Risk Title</th><th>Unmitigated Risk Impacts</th><th colspan="2">Assessment
Month | Trend</th><th>Comments</th></tr>
<tr><td colspan="5">RL-0041/WBS-041</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td>RCC-300-296-07: 300-296 Failure of a REC Cranes (B Cell, A Cell, A-D and Airlock, or CHA cranes)</td><td>Major crane repair must be performed during operations. This in-scope, unplanned work results in cost and schedule impacts to the project.

Risk Handling Strategy: Accept

Probability: Likely (75% to 90%)
Worst Case Impacts: $1,561K, 208 Days</td><td>  </td><td>  </td><td>Risk Trigger Metric: REC crane failure occurs during operations.

<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Determine B Cell Replacement Crane Options</td><td>3/19/2019</td><td>100%</td></tr><tr><td>Award Contract – B-Cell 10T Crane – 324</td><td>5/13/2019</td><td>Ongoing</td></tr></table>
Mitigation Assessment: Project management was briefed on vendor-assessed data to determine procurements of identified crane parts. The project determined to proceed with acquiring a crane replacement. These efforts are expected to reduce the potential for impacts.</td></tr>
<tr><td>RCC-300-296-15: 300-296 Cell sealing, interference removal and/or core drilling takes longer than planned</td><td>Unexpected field conditions encountered during interference removal, sealing of cell penetrations, and/or core drilling work scope. The unexpected field conditions subsequently cause in-scope unplanned work and result in schedule impacts to the project.

Risk Handling Strategy: Control

Probability: Very Likely (>90%)
Worst Case Impacts: $145.8K, 90 Days</td><td>  </td><td>  </td><td>Risk Trigger Metric: The project experiences unexpected field conditions outside their control that make cell sealing, interference removal, and core drilling more difficult than planned.

<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform Core Drilling and Shield Plug Installation (VN1200)</td><td>3/26/2019</td><td>Ongoing</td></tr></table>
Mitigation Assessment: No major changes in March. A majority of core drilling interferences have been identified as the project progresses with drilling necessary at the 324 Building in advance of installation of soil remediation equipment. The remaining core drilling efforts are planned to be completed over the upcoming period. Due to the uniqueness involved with work scope, there exists the potential for unexpected delays and additional core drilling efforts.</td></tr>
<tr><td>RCC-300-296-08: 300-296 Failure of Cell Shield Door</td><td>Failure of shield door(s) or crane shield door(s) shuts down cleanout of REC cells/airlock, penetration sealing in airlock, equipment installation, and other activities for remote soil removal. It may not be possible to repair a shield door due to radiation dose rate and location, resulting in cost and schedule delays.

Risk Handling Strategy: Accept

Probability: Likely (75% to 90%)
Worst Case Impacts: $460K, 96 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: During operations of cleanout activities, a cell shield door inoperable.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Preventative maintenance activities are being conducted</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: To assure REC shield doors maintain operability an engineering evaluation was conducted, resulting in the implementation of monthly PM’s and the procurement of spare parts.</td></tr>
<tr><td colspan="5">FY2019 Risk Triggers (Risk could be realized in FY2019)</td></tr>
<tr><td>RCC-300-296-01: Latent Conditions Impact Facility Modification</td><td>Latent conditions, poor visibility in REC cells, or drawing omissions, inconsistencies, or errors impact facility modifications (e.g. mechanical, electrical IH/RADCON hazards), resulting in unplanned work and subsequently, cost and schedule impacts.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $294.5K, 256 Days</td><td>  </td><td>  </td><td>Risk Trigger Metric: Available drawings may not reflect the actual conditions in the 324 Building or REC cells. Debris within the REC cells, as well as poor visibility may prevent the verification of in-cell features for installing penetrations, removing interferences, and supporting preparation activities for structural modifications.

<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform routine preventative maintenance activities</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No major changes in March. Uncertainties associated with aging 324 Building systems (e.g., stack sampling), sealing penetrations, and electrical outages needed for interference removal; there exists a potential for this risk to be realized. Based on the historical discovery of an elevated latent contamination level (NOC, CHPRC-1801178), corrective actions have been implemented along with additional controls. This risk will continuously be monitored as routine preventative maintenance activities are in place to reduce the likelihood of occurrence.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified risks/opportunities)</td></tr>
<tr><td>RCC-300-296-04DOE: 300-296 Seismic Event (Force Majeure)</td><td colspan="4">A “Force Majeure” incident, such as a seismic event, results in the loss of structural integrity; causing cost and schedule impacts to the project delivery. CHPRC Comment: CHPRC cannot manage the geological seismic movement that may impact the structural integrity of a building. Therefore, this risk is proposed to be transferred to DOE. DOE has “informally” accepted this risk as a transfer risk. A formal letter of acceptance (CHPRC-1705651) was sent to RL on December 12, 2017. Once this risk has been formally accepted, via acknowledgement from the RL contracting officer, it will be removed from the stoplight chart.</td></tr>
</table>

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0041/WBS-041				
RCC-300-296-23DOE: 300-296 Large Brush Fire (Force Majeure)	A brush fire ignited on the Hanford Site near the proximity of the 300-296 Waste Site, resulting in cost and schedule delays. CHPRC Comment: This risk was identified as "Force Majeure" and is beyond the capabilities of CHPRC to manage. Therefore, this risk was proposed to be transferred to DOE. DOE has "informally" accepted this risk as a transfer risk. A formal letter of acceptance (CHPRC-1705651) was sent to RL on December 12, 2017. Once this risk has been formally accepted, via acknowledgement from the RL contracting officer, it will be removed from the stoplight chart.			
RCC-300-296-27: 300-296 Requirement Changes Result in Additional Work/Entry Prerequisite Training	Due to complex-wide or facility specific changes in requirements outside of CHPRC's ability to manage (e.g. technical documents, procedures, training), project delivery will be impacted in terms of cost and schedule. CHPRC Comment: Changes to DOE orders, federal or state regulations, waste acceptance criteria established by another site contractor, or another DOE site could impact the baseline scope/schedule/cost. Although a contract change is required to incorporate changes to DOE orders, no contract change is required for federal or state regulations or for waste acceptance criteria changes. The potential criteria changes are outside of CHPRC's ability to manage. Therefore, this risk was proposed to be transferred to DOE. DOE has "informally" accepted this risk as a transfer risk. A formal letter of acceptance (CHPRC-1705651) was sent to RL on December 12, 2017. Once this risk has been formally accepted, via acknowledgement from the RL contracting officer, it will be removed from the stoplight chart.			

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	(13.0)	(13.6)	8.7	(0.6)	-4.5%	(22.3)	-164.1 %

Numbers are rounded to the nearest $0.1 million

CM Schedule Performance (-$0.6M/-4.5%)

The CM schedule variance is within reporting thresholds.

CM Cost Performance (-$22.3M/-164.1%)

The CM negative cost variance resulted from the March 2019 implementation of BCR-PRC-19-012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the PMB from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REAs), through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019. Implementation of this baseline change request (BCR) resulted in a one-time adjustment to the current period budget for work that had been planned in prior years that was modified by the agreement and to reflect the agreed on values of the impacted scope. This adjustment caused negative current period budgeted cost of work scheduled with corresponding negative current period budgeted cost of work performed.

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)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	631.0	621.7	583.9	(9.3)	-1.5%	37.8	6.1%	690.3	650.8	66.8	39.5

Numbers are rounded to the nearest $0.1 million

Contract-to-Date (CTD) Schedule Performance (-$9.3M/-1.5%)
The CTD schedule variance is within reporting thresholds.

CTD Cost Performance (+$37.8M/+6.1%)
The favorable cost variance is primarily due to completing Confirmatory Sampling - No Action (CSNA) waste sites early and under cost. In addition, less demolition was required for the K East Sedimentation Basin, and fewer resources are supporting the level of effort (LOE) program management and usage-based services scope. Some resources have been diverted to other priority work scope, and some resource sharing has occurred.

Variance at Completion (+$39.5M/+5.7%)
The 100K Closure positive variance at completion (VAC) is primarily due to labor; fewer resources have been supporting the LOE program management and usage-based services scope. Some resources have been diverted to other priority work scope, and some resource sharing has occurred. Additionally, the VAC is due to completing the CSNA waste sites early and under cost. Offsetting the positive variance, the 324 Building Disposition Project experienced increased costs associated with airlock cleanout, engineering and design activities, staff ramp up, and equipment procurement activities.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

	FY2019		
WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Projected Funding	Spending Forecast	Variance
RL-0041 Spending Forecast	148.3	125.5	22.8
Incremental Scope Change Pending Change Management	0.0	0.4	(0.4)
RL-0041 – Total	148.3	125.9	22.4

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis:
The FY2019 projected funding for project breakdown (PBS) structure RL-0041 is $148.3 million. The projected funding includes carryover from FY2018 and new budget authority. The spending forecast is based on the FY2019 PMB annual update submitted to RL with updates through December 2018.

FY2019 funding aligns with the RL Integrated Priority List (IPL). The variance primarily reflects the work scope included in the IPL that is pending authorization.

Critical Path Schedule:
Critical path analysis can be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0041 Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) enforceable milestones, non-enforceable target due dates, and commitments.

Number	Title	Due Date	Forecasted Date	Status/ Comment
M-016-85A	Complete Remote Excavation of 300-296 Waste Site	9/30/2019	2/12/2021	Milestone will be missed.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Concur on DSA/TSR Revision Comment Resolution	2/25/2019(A)	3/29/2019
RL Review EPHA Draft	3/29/2019	4/12/2019
RL Prepare DSA/TSR Revision SER	3/30/2019	4/1/2019
SRB Review SER for DSA/TSR Revision	4/18/2019	4/24/2019
RL Issue SER for 324 DSA/TSR	4/25/2019	5/1/2019
RL Approval EPHA Final	4/30/2019	5/14/2019
DOE Independent Design Review - IFC Structural Modification	6/25/2019	7/14/2019

Section G
Fast Flux Test Facility Closure
(RL-0042)

CH2MHILL
Plateau Remediation Company

T. E. Bratvold
Vice President for
Central Plateau Risk
Management Project

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

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

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	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

RL-0042 Accomplishments

- Received final approvals on the P-16 pump variable frequency drive (VFD) control circuits disconnection work package. The existing control circuits for the VFD need to be disconnected before the new P-16 VFD and associated hardware can be installed.
- Received final approval of the P-16 pump VFD drive replacement engineering change request (ECR).
- Finished incorporating internal comments into an ECR to replace the C670 fire control panel and routed for approvals. Panel replacement is needed to allow the fire pump to be disconnected from power without requiring a building outage.
- Continued incorporating internal comments into an ECR to replace obsolete panel boards and associated cables for LPN-43 in in Building 480A, LPN-18 in Building 480B, and LPN-51 in Building 4842B.

MAJOR ISSUES

Issue
Initiated development of an ECR to replace the aging diesel engine fire pump P-28; however, work was halted after determining that this replacement would require a long-term outage of the diesel backup to the fire water system.

Corrective Action
An alternative option was identified that involves replacing diesel fire pump P-61 in Building 481A. However, this will require additional work to restore power to the building and install additional valves to connect the P-61 replacement to the area wide water.

Status
A determination on how to proceed is pending discussion and direction from RL.

RISK MANAGEMENT STATUS

None currently identified.

PROJECT BASELINE PERFORMANCE
Current Month
($M)

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)
Total	0.1	0.1	0.1	0.0	6.3%	0.0	-49.7%

Numbers are rounded to the nearest $0.1M

CM Schedule Performance: (+$0.0M/+6.3%)
The schedule variance is within reporting thresholds.

CM Cost Performance: (+$0.0M/-49.7%)
The cost variance is within reporting thresholds.

Contract-to-Date ($M)

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	27.2	27.2	22.8	(0.0)	-0.0%	4.4	16.2%	28.1	24.2	1.4	3.9
Numbers are rounded to the nearest $0.1 million											

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

CTD Cost Performance (+$4.4M/+16.2%)
The cost variance reflects efficient use of resources to support deactivation activities.

Variance at Completion (+$3.9M/+13.8%)
The Variance at Completion reflects efficient use of resources to support deactivation activities.

Contract Performance Report Formats are provided in Appendix A.

FUNDS VS. SPEND FORECAST ($M)

	FY2019		
RL-0042 FFTF Closure	Projected Funding	Spending Forecast	Variance
RL-0042 Spending Forecast	4.3	2.5	1.8
Numbers are rounded to the nearest $0.1 million			

Funds Analysis
Fiscal year 2019 funding for project breakdown structure RL-0042 is $4.3 million. The spending forecast is $2.5 million, which represents increased support due to electrical component failures and configuration challenges, increased interest by regulators requiring additional inspections, and a recent failure of the water system/water piping.

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

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

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

CH2MHILL
Plateau Remediation Company

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 1 - WORK BREAKDOWN STRUCTURE

DOLLARS IN Thousands of $

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2019 / 03 / 24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	X YES *(YYYYMMDD)* 2009 / 09 / 18

5. CONTRACT DATA

a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS *(YYYYMMDD)*
1	5,588,957	732,326	254,770	5,843,728	6,457,748	5,843,728	6,457,748	

6. ESTIMATED COST AT COMPLETION

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	6,139,700		
b. WORST CASE	6,216,861		
c. MOST LIKELY	6,202,978	6,321,284	118,306

7. AUTHORIZED CONTRACTOR REPRESENTATIVE

a. NAME (Last, First, Middle Initial)	b. TITLE	d. DATE SIGNED *(YYYYMMDD)*
Underwood, Teresa	Prime Contract Compliance Manager	

c. SIGNATURE

8. PERFORMANCE DATA

CAPN.PBS	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE					BUDGETED	ESTIMATED	VARIANCE
ITEM	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	COST VARIANCE	SCHEDULE VARIANCE	BUDGET			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
RL-0011 Nuclear Mat Stab & Disp PFP	56,502	51,861	4,380	-4,641	47,481	1,081,259	1,057,881	1,169,544	-23,378	-111,663	0	0	0	1,101,583	1,217,211	-115,629
RL-0012 SNF Stabilization & Disp	655	711	1,421	56	-710	751,452	750,520	721,302	-932	29,218	0	0	0	761,100	730,644	30,455
RL-0013 Solid Waste Stab & Disp	-2,570	-1,842	11,959	728	-13,801	1,401,291	1,398,349	1,312,133	-2,942	86,216	0	0	0	1,484,146	1,396,730	87,416
RL-0030 Soil &Water Rem-Grndwtr/Vadose	5,938	6,394	8,668	456	-2,273	1,576,914	1,576,734	1,522,649	-180	54,085	0	0	0	1,644,997	1,586,031	58,966
RL-0040 Nuc Fac D&D - Remainder Hanfrd	5,705	3,347	4,819	-2,357	-1,472	526,768	525,918	501,464	-850	24,454	0	0	0	554,854	534,087	20,767
RL-0041 Nuc Fac D&D - RC Closure Proj	-12,976	-13,564	8,698	-588	-22,262	630,990	621,724	583,948	-9,266	37,776	0	0	0	690,268	650,752	39,517
RL-0042 Nuc Fac D&D - FFTF Proj	84	89	134	5	-44	27,232	27,226	22,828	-6	4,399	0	0	0	28,137	24,244	3,893
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL	53,338	46,997	40,078	-6,341	6,919	5,995,908	5,958,352	5,833,868	-37,556	124,484	0	0	0	6,265,085	6,139,700	125,385
f. MANAGEMENT RESERVE														63,278		
g. TOTAL	53,338	46,997	40,078	-6,341	6,919	5,995,908	5,958,352	5,833,868	-37,556	124,484	0	0	0	6,328,363		

9. RECONCILIATION TO CONTRACT BUDGET BASELINE

a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									-37,556	124,484				6,328,363	6,139,700	188,663

**CPR Format 1 displays fully burdened dollars which includes indirect G&A that is distributed to each Project.*

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 2 - ORGANIZATIONAL CATEGORIES

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

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2019 / 03 / 24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	X YES *(YYYYMMDD)* 2009 / 09 / 18

5. PERFORMANCE DATA

WBS.Resp Org Group	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE					BUDGETED	ESTIMATED	VARIANCE
ITEM	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	COST VARIANCE	SCHEDULE VARIANCE	BUDGET			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
34 - Env Program & Strategic Plng	986	795	1,106	-191	-311	91,664	91,285	84,400	-379	6,885	0	0	0	98,812	92,119	6,693
35 - Business Services	-417	-417	0	0	-417	476,879	476,879	453,596	0	23,283	0	0	0	476,879	453,596	23,283
36 - Prime Contract & Proj Integr	0	0	0	0	0	1,111	1,111	492	0	618	0	0	0	1,111	492	618
37 - Resource Mgmt & Strategic Intg	130	130	56	0	75	8,452	8,452	5,070	0	3,382	0	0	0	9,314	5,763	3,551
3B - PFP Closure Project	56,645	52,003	4,380	-4,641	47,623	992,620	969,242	1,088,479	-23,378	-119,238	0	0	0	1,012,943	1,136,147	-123,204
3C - Waste & Fuels Management Project	3,016	3,796	9,337	780	-5,541	1,248,375	1,245,532	1,161,723	-2,842	83,810	0	0	0	1,313,588	1,227,810	85,778
3D - Soil & Groundwater Remediation	5,006	5,653	7,551	647	-1,899	1,383,562	1,383,761	1,330,687	199	53,074	0	0	0	1,444,281	1,386,177	58,104
3G - K Basin Oper & Plateau Remediation Project	6,359	5,613	4,501	-747	1,112	1,072,826	1,068,941	1,007,127	-3,885	61,815	0	0	0	1,113,117	1,046,532	66,585
3H - River Risk Management Project	-24,127	-23,964	8,212	162	-32,177	255,051	248,637	257,496	-6,414	-8,859	0	0	0	300,896	312,399	-11,503
3K - Central Plateau Risk Reduction	5,741	3,389	4,936	-2,352	-1,547	465,369	464,512	444,798	-856	19,714	0	0	0	494,144	478,664	15,480
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL *(Performance Measurement Baseline)*	53,338	46,997	40,078	-6,341	6,919	5,995,908	5,958,352	5,833,868	-37,556	124,484	0	0	0	6,265,085	6,139,700	125,385
f. MANAGEMENT RESERVE														63,278		
g. TOTAL	53,338	46,997	40,078	-6,341	6,919	5,995,908	5,958,352	5,833,868	-37,556	124,484	0	0	0	6,328,363		

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE		DOLLARS IN THOUSANDS	Form Approved OMB No. 0704-0188
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA	2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:	3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009	4. REPORT PERIOD a. FROM: 2019/02/25 b. TO: 2019/03/24

5. CONTRACT DATA

a. ORIGINAL NEGOTIATED COST	b. NEGOTIATED CONTRACT CHANGE	c. CURRENT NEGOTIATED COST (A + B)	d. ESTIMATED COST AUTH UNPRICED WORK	e. CONTRACT BUDGET BASE (C + D)	f. TOTAL ALLOCATED BUDGET	g. DIFFERENCE (E - F)
4,312,366	$1,276,591	$5,588,957	$732,326	$6,321,284	$6,328,363	($7,079)

h. CONTRACT START DATE	i. DEFINITIZATION DATE	j. PLANNED COMPL DATE	k. CONT COMPLETION DATE	l. EST COMPLETION DATE
6/19/2008	6/19/2008	9/30/2019	9/30/2019	9/30/2019

6. PERFORMANCE DATA — BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	SIX MONTH FORECAST +1 Apr-19	+2 May-19	+3 Jun-19	+4 Jul-19	+5 Aug-19	+6 Sep-19	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	UNDISTRIB BUDGET	TOTAL BUDGET
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
a. PM BASELINE																	
(BEGIN OF PERIOD)	**5,942,570**	**47,533**	**49,712**	**56,261**	**40,852**	**35,687**	**45,156**	**216,012**	**3,391,477**	**391,653**	**471,323**	**504,826**	**485,028**	**470,649**	**543,470**	**175,358**	**6,433,783**
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																	
BCR-013-19-006R0 - W-135 Scope Realignment for Operating Margin Analysis															**0**		**0**
BCR-PRC-19-012R0 - Implement Global Settlement															**6,660**		**6,660**
BCR-PRC-19-010R0 - Undistributed Budget Adjustment March 2019																**(175,358)**	**(175,358)**
BCRA-PRC-19-008R0 - HPIC Updates March FY2019															**0**		**0**
c. PM BASELINE (END OF PERIOD)	**5,995,908**	**53,338**	**49,828**	**56,601**	**41,023**	**35,773**	**45,226**	**40,726**	**3,391,477**	**391,653**	**471,323**	**504,826**	**485,028**	**470,649**	**550,130**	**0**	**6,265,085**
7. MANAGEMENT RESERVE																	**63,278**
8. TOTAL																	**6,328,363**

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING

Dollars in: FTE

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2019 / 03 / 24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE [ ] NO [X] 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)* SIX MONTH FORECAST BY MONTH *(Enter names of months)* +1 APR 2019 (4)	+2 MAY 2019 (5)	+3 JUN 2019 (6)	+4 JUL 2019 (7)	+5 AUG 2019 (8)	+6 SEPT 2019 (9)	ENTER SPECIFIED PERIODS OCT 2019 (10)	NOV 2019 (11)	DEC 2019 (12)	FY20-LC (13)	ATCOMPLETE (14)	AT COMPLETION (15)
300 - Office of the President	6	845	7	7	7	7	7	7	0	0	0	0	0	885
303 - Internal Audit	5	561	6	6	6	6	6	6	0	0	0	0	0	596
304 - General Counsel	4	519	4	4	4	4	4	4	0	0	0	0	0	545
31 - Communications	7	1163	8	8	9	9	9	8	0	0	0	0	0	1216
32 - Safety Health Security & Quality	50	8114	65	64	64	64	64	63	0	0	0	0	0	8497
34 - Env Program & Strategic Plng	37	5543	47	45	46	46	46	48	1	1	3	1	0	5826
35 - Business Services	48	7726	54	56	63	63	63	60	0	0	0	0	0	8086
36 - Prime Contract & Proj Integr	30	4147	40	40	41	41	41	41	0	0	0	0	0	4393
37 - Resource Mgmt & Strategic Intg	33	3076	40	43	43	43	43	43	0	0	0	0	0	3331
38 - Project Technical Services	31	6203	42	39	38	39	39	39	0	0	0	0	0	6439
3B - PFP Closure Project	179	52460	203	203	200	203	201	204	185	150	133	32	0	54174
3C - Waste & Fuels Management Project	329	55937	386	393	403	385	383	381	15	9	3	6	0	58301
3D - Soil & Groundwater Remediation	236	41103	263	261	265	263	259	228	7	5	7	23	0	42684
3G - K Basin Oper & Plateau Remediation Project	182	35356	219	224	235	224	216	202	14	11	19	12	0	36731
3H - River Risk Management Project	207	7526	229	231	232	227	225	229	12	0	0	0	0	8912
3K - Central Plateau Risk Reduction	186	18628	218	231	214	188	189	193	25	12	0	0	0	19898
g. TOTAL DIRECT	1570	248908	1831	1854	1871	1813	1796	1756	260	187	166	73	0	260514

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

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 5 - EXPLANATIONS AND PROBLEM ANALYSES

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract	a. FROM (YYYY/MM/DD) 2019/02/25
b. LOCATION (Address and ZIP Code) Richland, WA 99354	b. NUMBER DE-AC06-08RL14788		b. PHASE Base	b. TO (YYYY/MM/DD) 2019/03/24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE 2009/09/18 NO YES X	

	BCWS	BCWP	ACWP	SV in $	SV in %	CV in $	CV %	SPI	CPI
Current:	53,338	46,997	40,078	(6,341)	-11.9%	6,919	14.7%	0.88	1.17
Cumulative:	5,995,908	5,958,353	5,833,868	(37,556)	-0.6%	124,484	2.1%	0.99	1.02
	BAC	EAC	VAC in $	VAC in %	TCPI				
At Complete:	6,271,430	6,094,101	177,330	2.8%	1.20				

Explanation of Variance/Description of Problem:

Current Period Schedule and Cost Variance: The current month (CM) negative schedule variance is primarily due to project breakdown structure (PBS) RL-0011 delays in resuming debris disposition and restarting low- and high-risk demolition. The project baseline assumes high risk demolition for 235-Z Facility would be complete in March. However, due to impacts from stop works, the loss of the D&D crews to other Hanford contractor hiring actions, and impacts from adverse weather in February and early March, the project has not yet completed debris disposition. The project is working with RL on a BCR planned for April to draw DOE PFP CAP 2 Project contingency to adjust the project baseline to address the above noted impacts.

Also contributing to the negative schedule variance is PBS RL-0040 due the adverse winter weather conditions experienced in the month. Grout placement activities at Tunnel 2 were put on hold from February 4 through March 11, 2019. Snow build up prevented waste loadout at other facilities into ERDF containers. Equipment surveys were also impacted because of the cold weather; crews could not open doors for ventilation to remove Radon from the building in the 202-S Facility. Additionally, field walk-downs for the REDOX complex haul road, trailer, and ventilation procurements were halted due to snow and ice accumulation. Finally, the removal of the 200 West steam lines experienced delays due to accessibility to work areas requiring snow clearance, exterior freezing temperatures not conducive to water application for glove bag abatement, and heavy equipment operators working higher priority snow removal on the Hanford Site. The weather cleared and allowed for steam line removal work to continue the final two weeks of March.

The CM positive cost variance is primarily attributed to implementation of BCR-PRC-19-012R0, *Mod 684 – Implement Global Settlement*, which incorporated the impacts to the performance measurement baseline (PMB) from the RL/CHPRC agreement on the settlement of pending PRC changes, such as change proposals and requests for equitable adjustment (REA), through September 30, 2018, as documented in PRC Modification 684, dated January 9, 2019. The implementation of the global settlement included decreases and increases to BCWS and BCWP which netted positive.

The positive cost variance was partially offset by PBS RL-0013 attributed to PFP TRU commercial repackaging and large box commercial TRUM repack group subcontract pricing.

Cumulative Schedule Variance: The variance is within reporting thresholds.

Cumulative Cost Variance: The variance is within reporting thresholds.

Impact:

Current Period Schedule: The current month schedule variance is not expected to impact the overall contract schedule.

Current Period Cost: Cost impacts are being estimated and will be incorporated in the project estimate to complete (ETC).

Cumulative Schedule: N/A

Cumulative Cost: N/A

Corrective Action:

Current Period Schedule: No corrective actions have been identified.

Current Period Cost: No corrective actions necessary.

Cumulative Schedule: N/A

Cumulative Cost: N/A

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

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

CHPRC continues to track completion of the contract scope within budget and is currently projecting a variance at completion (VAC) of $125.4 million, with $63.3 million of management reserve (MR), for a total positive variance of $188.7 million. For March, the project was 11.9 percent behind schedule and 14.7 percent under planned cost. Contract to date (CTD); the project was 0.6 percent behind schedule and 2.1 percent under planned cost.

There was no increase in the difference between the Contract Budget Base and the Total Allocated Budget on Format 3 since last month.

Two of the four BCRs implemented in the period impacted the PMB:

- BCR-PRC-19-012R0, Mod 684 – Implement Global Settlement
- BCR-PRC-19-010R0, Undistributed Budget Adjustments March 2019

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

Variance in Performance BAC and EAC: The variance at complete (VAC) between the BAC and EAC this month is a +$125.4 million, +2.0% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPs - In Process		
	Total Authorized Unpriced Work	$732,326
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	Grand Total Adjustments	$732,326

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

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
BCR-PRC-19-010R0	*Undistributed Budget Adjustments March 2019*	000, RL-0011, RL-0012, RL-0013, RL-0030, RL-0040, RL-0041	2019	-$175,357.8K

The UB decreased $175,357.8K in March.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
N/A	*N/A*	N/A	2019	$0

There was no change to MR in March.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
BCR-PRC-19-012R0	*Mod 684 – Implement Global Settlement*	RL-0013, RL-0040, RL-0041	2019	$13,165K

The fee increased $13,165K in March.

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

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 ETC or BCWR if greater plus the to-go (available) management reserve, which assumes all efficiencies gained contract-to-date will be eroded at completion and all available management reserve is used (e.g., all identified risks realized), plus the scope identified in the Trend Log that is not in the EAC. The Best/Worst and Most Likely EAC values are documented in the Format 1 Report.			
Prepared by: Project Control Staff	**Date:** 04/23/2019	**Approved by:**	**Date:**

Appendix B
Project Services and Support
(WBS 000)

CH2MHILL
Plateau Remediation Company

K. A. Wooley
Vice President for
Safety, Health, Security
and Quality

M. A. Wright
Vice President for
Project Technical
Services

March 2019
CHPRC-2019-03, 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. J. Henderson
Director of
Communications

K. K. Dickerson
Vice President for
Prime Contract and
Project Integration

M. W. Wells (Acting)
Vice President for
Business Services
Chief Financial Officer

C. J. Simiele
Vice President for
Resource Management
and Strategic Integration

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. This section is reported on a quarterly basis.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
19-EMS-ADMIN-OBJ1-P1	Reduce energy intensity.	Increase facility occupancy rates to greater than 85 percent by compressing occupancy and vacating underutilized facilities. Occupancy compression to be maintained through disposition of buildings or square footage reduction.	9/30/2019	60%
19-EMS-PTS-OBJ1-P1	Spill prevention/waste minimization/pollution prevention.	Reduce and/or eliminate spills to the environment by surveillances and on-going training. Monitor and evaluate spill prevention program and existing techniques. Also, survey universal waste and recycling areas.	9/30/2019	48%
19-EMS-PTS-OBJ2-P1	Monthly chemical management inspection/pollution and spill prevention.	Ensure chemical products are accurately tracked, maintained, and excessed/disposed. Perform quarterly assessment on chemical inventory locations.	9/30/2019	50%

TARGET ZERO PERFORMANCE

	Current Quarter	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A

	Current Quarter	Rolling 12 Month	Comment
First Aid Cases	2	6	2/20/2019 – Employee slipped on black ice and fell, resulting in an abrasion to the left knee. Employee was seen at HPMC and given over the counter medications and released without restrictions. (25077) 3/7/2019 – Employee stepped off rug and foot slipped, causing them to lose their balance and fall to their knees. Taken to HPMC and released without restrictions. (25097)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- There have been two First Aid injuries reported during this quarter in the functional groups.
  - Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
    - Performed Senior Supervisory Watch (SSW) at the Plutonium Finishing Plant Closure Project (PFP).
    - Submitted correspondence CHPRC-1603202 R10, *Quarterly Report of Highly Radioactive Beryllium Samples Processed Fourth Quarter CY 2018.*
    - Site visit to the Mine Safety Appliances respiratory protection equipment manufacturing facility and met with the MSA Engineering Product Team.
    - Provided personnel resources to support CHPRC Voluntary Protection Program (VPP) self-assessment.
    - Continued support of the Conduct of Work initiative.
    - Performed and documented Work Site Assessment (WSA) for the implementation of the Hanford Site Respiratory Protection Program at the Environmental Restoration Disposal Facility (ERDF).
    - Published annual update to PRC-MP-SH-32219, *10 CFR 851 CHPRC Worker Safety and Health Program Description*.
    - Finalized transition of the Industrial Hygiene Sample Management process.
    - Updated Industrial Hygiene Technical Evaluation for Heat Stress Clothing Adjustment Factors.
    - Initiated a SHS&Q Conduct of Work mentor evaluation to provide feedback and improvement suggestions on submitted event reports.
    - Completed and submitted the semi-annual CHPRC beryllium registry to HMPC.
    - Completed Extent of Condition related to the PFP hose-whipping event.
    - Developed and issued a Special Safety Bulletin related to Preventing Hand Injuries.
    - Completed Aviation Safety Program assessment, SHS&Q-2019-WSA-22168.
    - Completed ERDF Respiratory Issuance assessment, SHS&Q-2019-WSA-23224.
    - Published minor change to PRC-POL-SH-54212, Vehicle Safety Policy, to align with the Hanford Site 2019 Traffic Safety Initiative.
  - Radiological Control accomplishments:
    - Completed fieldwork for the first in a series of WSAs related to 10CFR835 compliance. Factual accuracy review in progress.
    - Completed Radiological Work Planning WSA.

- Implemented Sentinel (radiological access control system) company-wide.
- Completed annual dosimetry exchange.
- Completed year-end dosimetry documents for calendar year (CY) 2018.
- Support dose evaluations of multipack dosimetry in use at River Risk Management Project (RRMP) 324 Building.
- Provided extended dosimetry operations support to PFP project to expedite bioassay schedule for influx of new hires.
- Radiological Control Technician (RCT) trainees – completed aptitude testing of applicants, conducted interviews, and identified preferred candidates to Human Resources to send out offers. Twenty-two RCT trainees accepted offers.
- Conducted academic testing and on-the-job training for new RCTs.
- Completed lesson plan reviews for RCT cycle two training.
- Hired 15 RCTs to fill current project vacancies.
- Hired new RADCON manager to support the ERDF and Soil and Groundwater Remediation Project (S&GRP).
- Completing planning/scheduling for RCT trainee course; contract for Mission Support Alliance, LLC (MSA) HAMMER instructor support was developed and approved.
- Continue update of Dosimetry Operations procedures to be compliant with Sentinel use.
- Developed new qualification card for health physicists/rad engineers and completed gap training evaluation for existing health physicists/rad engineers.
- Held quarterly RADCON leadership meeting.
- Updated sealed radioactive source inventories.
- DOE Radiological Source Registry and Tracking (RSRT) updated.
- Updated PRC-PRO-RP-387 to include company technical authority responsibilities for maintaining RSRT.
- In coordination with Radiological Site Services, developed a process to improve instrument turnaround time on out of tolerance reports.
- Installed new version of APEX Alpha/Beta software at PFP Tennelecs and established test protocols for software quality assurance process.
- Developed on-the-job training for new APEX Alpha/Beta software. Initiated updates to Central Radiological Counting Facility computers.
- Functional testing of new Lapel Samplers (Radeco and F&J models) extended to Central Plateau Risk Management (CPRM).
- Supported Emergency Preparedness (EP) reviewing Drill scenarios; identified drill issues to be resolved; supported training revisions for radiological control (RADCON) controller/evaluators; identified and provided instrument information for RadEye GFEX used by the Hanford Fire Department and included that information in the RADCON weekly update provided to the RADCON organization.
- Provided technical support for site-wide Emergency Preparedness exercise planning.
- Assumed technical authority responsibility for radiological instrument maintenance procedures and initiated updates to those procedures to make them consistent with Radiation Protection Program procedures.
- Supported projects in performing field surveys with Bladewerx Alpha Survey Meter.
- Provided radiological work planning support for CPRM.
- Provided RCT first line manager coaching and mentoring support provided to PFP.
- Provided Clearance Survey Plan Preparation training and Radiological Work Planning initial and refresher training for project personnel.
- Conducted monthly RADCON manager's presentations to RL.
- Initiated RCT first line manager leadership seminars.
- Continued support of the Hanford RADCON Forum authorized limits working group.

- Completed evaluation of outdoor area work activities to ensure alignment with Completed Decision Making Package PRC-1809-CDMP-0147, *Outdoor Air Emission Technical Basis Document*.
- Completed Radiological Protection Corrective Action Mid-Point Effectiveness Review and initiated follow-up actions in the Condition Reporting and Resolution System.
- Processed two administrative control limit extensions for 324 Building workers to support crane repairs.
- Issued 2019 Radiological Protection Excellence Plan.
- Initiated CHPRC as low as reasonably achievable program steering committee to reinvigorate the existing process.
- Continued providing weekly updates to the Radiological Protection organization to ensure important information is shared.
- Supported RRMP senior management lead assessment.
- Participated in CHPRC staffing process Kaizen.
- Completed focused management observation programs on doffing practices and radiological postings/labeling.
- Initiated radiological mini-drills within the projects.

o Nuclear Operations Support & Compliance accomplishments:

- Correspondence transmitted to Department of Energy Richland Operations Office (RL):
  - Letter, CHPRC-1803859.1, dated January 7, 2019, *Transmittal of the 105KW Facility Documented Safety Analysis, PRC-STP-00946, Revision 1 and the 105KW Facility Technical Safety Requirements, PRC-STP-00992, Revision 1, Comment Incorporation*.
  - Letter, CHPRC-1900144, dated January 14, 2019, *Transmittal of the 2018 Annual Update of the 224-B Facility Safety Basis and the Unreviewed Safety Question Determinations Summary*.
  - Letter, CHPRC-1900144 REISSUE, dated January 31, 2019, *Transmittal of the 2019 Annual Update of the 224-B Facility Safety Basis and the Unreviewed Safety Question Determinations Summary*.
  - Letter, CHPRC-1900557, dated February 21, 2019, *Transmittal of the 2019 Annual Update to the CH2M HILL Plateau Remediation Company Safety Management Programs, HNF-11724, Revision 15, for RL Review and Approval.*
  - Letter, CHPRC-1802468.1, dated February 27, 2019, *Transmittal of the Documented Safety Analysis for the Reduction-Oxidation Facility, HNF-13830, Revision 8, the Technical Safety Requirements for the Reduction-Oxidation Facility, CHPRC-03114, Revision 1, Comment Incorporation and Fire Hazards Analysis for the Reduction-Oxidation Facility, CP-45673, Revision 3.*
  - Letter, CHPRC-1900810, dated March 5, 2019, *Transmittal of the Monolith Special Packaging Authorization, HNF-62901, Revision 0*.
  - Letter, CHPRC-1900863, dated March 11, 2019, *Transmittal of the 2019 Annual Update of the Fast Flux Test Facility Safety Basis and the Unreviewed Safety Question Determinations Summary*.
  - Letter, CHPRC-1900823, dated March 11, 2019, *Transmittal of the Solid Waste Operations Complex Master Documented Safety Analysis, HNF-14741, Revision 12A, and the Technical Safety Requirements for the Solid Waste Operations Complex, HNF-15280, Revision 12A.*
  - Letter, CHPRC-1900916, dated March 19, 2019, *Submittal of the Annual Update of the Plutonium Finishing Plant Safety Basis and the Unreviewed Safety Question Determinations Summary.*

- Correspondence received from RL:
  - Letter, 19-NSD-0010_RL, dated January 2, 2019, *Special Packaging Authorizations (SPAs) – Safety Evaluation Checklists (SECs)*.
  - Operational Awareness 80611 – 2018 Annual Update of the CSB Safety Basis (No Changes).
  - Operational Awareness 80948 – 2019 Annual Update of 224-B Facility Safety Basis (No Changes Requiring SER).
  - Letter, 19-NSD-0017_RL, dated March 1 2019, *Approval of the 105KW Facility Documented Safety Analysis (DSA), PRC-STP-00946, Revision 1 and the 105KW Facility Technical Safety Requirements (TSRs), PRC-STP-00992, Revision 1, Comment incorporation*.
  - 19-NSD-0020_RL, dated March 26, 2019, *Documentation for Continued Use of Radidose Version 3.0 Software*.
  - Operational Awareness 8139 – 2019 Annual Update of FFTF Safety Basis (No Changes Requiring SER).

- Contractor Assurance Regulatory Reporting (CARR) accomplishments:
  - 582 Condition Reports (CRs) were screened:
    - One significant issue identified.
    - Three adverse issues identified.
    - 257 Track Until Fixed issues identified.
    - 158 Trend Only items identified.
    - 157 Opportunities for Improvement (OFI) items identified.
    - Six Screened Out.
  - 580 CRs administratively closed.
  - 838 CRs actions administratively closed.
  - Provided course 600082, *Responsible Manager, Issues Management*, to 17 employees.
  - Provided Cause Evaluator support to the President's Office on issues identified in U.S. Department of Energy Office of the Inspector General Special Report, DOE-OIG-19-04.
  - Provided Cause Evaluator support to RRMP for Occurrence Reporting and Processing System (ORPS) report EM-RL—CPRC-324FAC-2017-006, *Two Workers Experienced Potential Electrical Shock.*
  - Provided full time support to PFP Issues Management and Occurrence Reporting activities.
  - Provided Occurrence Reporting support to the River Risk Management Project.
  - Submitted ORPS final reports for: EM-RL--CPRC-324FAC-2017-006, *Two Workers Experienced Potential Electrical Shock,* and EM-RL--CPRC-PFP-2018-0007, *Near Miss – Hose Whipped while being Blown Out Striking Worker's Hand*; EM-RL--CPRC-GENLAREAS-2018-0003, *Discovery of Exposed Hazardous Energy (Cut Heat Trace)*;
  - Provided support for the bi-monthly Defense Nuclear Facilities Safety Board (DNFSB) Resident Inspector Meeting.
  - Provided coordination and support for an On-Site DNFSB Review of building 324 Pit 6 Soil Stabilization.
  - Coordinated DNFSB visit and Waste Encapsulation and Storage Facility (WESF), management of the cesium and strontium capsule (dry storage) project (w-135) walkdown.
  - Fifty-eight documents were provided in response to DNFSB requests for information (RFI).
  - Provided support to the DNFSB Hanford Site Resident Inspectors.
  - Co-ordinated review and comment resolution of the Weekly Hanford Site Resident Inspector Report.
  - Provided support for an upcoming 324 Building Structural Modification DNFSB review.
  - Provided support for an upcoming DNFSB meeting to discuss recent electrical issues at 105KW and T Plant.

- Three external lessons learned (LL) were submitted in OPEXShare: 2019-WFMP-0001, *Inadequate Waste Evaluation for Silver Coated Canister Seals,* 2019-KBO-0001, *Rocks Thrown From the Tires of Rolling Stock*; 2019-PFP-0001, *Hose Not Mechanically Secured during Blow-Down Strikes Worker*.
- One external Just-In-Time was submitted in OPEXShare: 2019-RL-HNF-0001, *Ungrounded Short Discovery in Process Technology HTX Series Heater*.
- Two internal LL were submitted in OPEXShare: 2019-WFMP-0002, *Assumptions Regarding Gross Weight of a Manlift Leads to Trailer Damage; 2019-SHSQ-0001, Notify Hanford Fire Department of All Fires Including Smoking Receptacles.*
- One external Best Practice was submitted in OPEXShare: 2019-WFMP-0003, *Visual Verification Finds Non-compliant Waste.*

o Performance Oversight, Assessment, and Quality Assurance accomplishments:

- Conducted in-field work and issued final for 10 CFR 835 Subparts I & N, *Reports to Individuals and Emergency Exposure Situations*, assessment that were conducted January through February 2019.
- Initiated planning for 10 CFR 835 Subpart C, *Standards for Internal and External Exposures*. Assessment will include coordination of activities with MSA.
- Continued in-field work for *SHS&Q-2019-SURV-22806, PRC-MP-QA-599, Section 5.0 Work Processes (5.3.3, 5.3.4, 5.3.6) Special Process, Identification and Control of Items, Nondestructive Assay (NDA), including review of NDA equipment and program.*
- Initiated fieldwork for SHS&Q-2019-SURV-22616, PRC-MP-QA-599, Section 4.0 Documents and Records.
- Completed Work Site Assessment SHS&Q-2019-WSA-22618, *Software Quality Assurance Program Implementation.*
- Complete Surveillance SHS&Q 2019-SURV-23041, *Extent of condition to evaluate minor change.*
- Completed Surveillance SHS&Q-2019-SURV-23175, *Extent of condition to determine if OCRWM implementing procedures that create records are so identified as records.*
- SHS&Q-2019-SURV-23332, MOP Performance was completed and issued.
- PO-2019-MA-21590, Repetitive Use Work Package Hazard Analysis Quality was completed and issued.
- SGRP-2019-MA-21844, Sponsored Management Assessment for Compliance with DOE-0336 was completed and issued. SHS&Q provided oversight of the MA planning, performing, and report writing.
- 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. Provided specific assessment mentoring to K Basin Operations, CPRM, S&GRP, RRMP, W&FMP, Business Services, and SHS&Q organizations.
- Generated lines of inquiry to support Conduct of Work core concept development activities.
- One engineer completed training to perform Office of Civilian Radioactive Waste Management assessments.
- DOE entrance meeting from AU-19-ESQ-CHPRC-002, Quality Assurance Program and Suspect/Counterfeit Item Prevention
- PRC-PRO-QA-40102, *Quality Assurance Engineer Training and Qualification Program* was revised to align with current practice. Applicable MSA Statement of Work was updated.

- The following forms were updated: A-6005-218, Maintenance of Lead Proficiency Record; A-6004-829, Lead Qualification/Certification Record; Cancelled: Obsolete, A-6005-219, Independent Assessor Qualification.

o Fire Protection (FP) accomplishments:
- Transmitted "Annual Fire Protection Summary Information for CY2018" to RL.
- Reviewed latest EA-31 draft report of "Fire Protection Program Implementation Assessment at CWC and T Plant". Comments provided to RL as requested.
- Completed 402 Building (Sodium Storage Facility) Facility Fire Protection Assessment.
- FP staff continue to perform numerous work package reviews and issue Hanford Fire Marshal permits in support of planned activities.
- Canister Storage Building (CSB) Fire Hazards Analysis (FHA) was approved and transmitted to RL.
- REDOX FHA is being prepared for transmittal to RL. All comments from the Hanford Fire Marshal's Office have been satisfactorily resolved.
- Performed WESF monthly walkdown.
- Provided support for PFP resumption actions, including working with facility and MSA staff to update the PFP FHA. The update will document the Fire Water Loop as a "compensatory measure for temporary condition" and will reflect current building and system configuration.
- Supported evaluation of options for Interim Safe Storage of K East and K West reactors.
- Issued Facility Fire Protection Assessment (FFPA) schedule for CY2019.
- Hired replacement Fire Protection Engineer (FPE).
- FFTF FHA is being prepared for transmittal to RL. All comments from the Hanford Fire Marshal's Office have been satisfactorily resolved.
- Completed 324 Building quarterly combustible control assessment.
- Supported evaluation of options for Interim Safe Storage of K East and K West reactors.
- Completed required WSA on 'Control of Explosive or Incendiary Material.'
- Completed required WSA on 'Annual Review of Designated Hot Work Permits.'
- Developed training material on FP requirements for program and project personnel.
- FP engineers completed training on fire modeling codes (Consolidated Model of Fire Growth and Smoke Transport and Himes).
- Produced 'Thinking Target Zero' article on requirements for working off-road during upcoming fire season.

o Conduct of Work Mentor activities:
- Attended and presented at the VPP quarterly meeting.
- Briefed SHS&Q vice president on mentoring observations.
- Had discussions with RADCON and S&H directors to discuss their programs and the mentor role.
- Attended numerous plan of the day and pre-job briefings associated with 324 Building, 100K Area, CPRM, and S&GRP, and provided feedback on good practices and areas for improvement.
- Attended two Integrated Planning and Reporting System meetings associated with 324 Building work.
- Participated in a 100K event critique.
- Assisted the performance assurance Causal Analysis point of contact in developing a 5-Why tree.
- Attended Employee Zero Accident Councils (EZAC) at W&FMP and CPRM.
- Facilitated development of a Conduct of Operations/Conduct of Work PowerPoint briefing for use with the on boarding of new RCTs.
- Had discussions with RADCON and S&H directors to discuss observations related to their programs.

- Attended Environmental Awareness training at HAMMER.
- Attended Apparent Cause Analysis training at HAMMER.
- Attended the CHPRC Leadership Meeting.
- Attended the staff meetings for both the RADCON and Occupational Safety and Health groups.
- Attended the Environment, Safety and Health directors meeting with the SHS&Q vice president.
- Reviewed all event investigation and critique written programs and processes.
- Attended the SHS&Q all-hands meeting.
- Assisted the review and design of a new Conduct of Work SharePoint website.
- Attended Conduct of Work staff meetings.

Environmental Program and Strategic Planning (EP&SP)

- **Environmental Protection**
  - Provided assistance to CPRM and U.S. Department of Energy, Richland Operations Office (RL) in resolving U.S. Environmental Protection Agency (EPA) and Washington state Department of Ecology (Ecology) concerns over the transition of the REDOX main stack from the Air Operating Permit (AOP) to operation under Comprehensive Environmental Response, Compensation, and Liability Act authority.
  - Supported CHPRC and RL efforts in responding to Ecology comments on PUREX Dangerous Waste Permit modifications. Ecology comments were successfully resolved. The permit modification package was approved on February 19, 2019, and delivered to Ecology the same day.
  - Provided assistance to RRMP in preparing and submitting a request to Ecology to withdraw Integrated Disposal Facility (IDF) Class 2 permit modification and replace it with a Class 3 permit modification. The Class 3 permit modification will transition IDF from a pre-active waste management unit to active status.
  - Supported CHPRC and RL efforts to reach a tentative agreement with Ecology on an implementation strategy to comply with major risk labeling amendments to Washington Administrative Code (WAC) Chapter 173-303. The amendments were adopted by Ecology on January 28, 2019, and become effective on April 28, 2019.
  - Supported CHPRC and RL efforts to obtain Ecology approval and issue of permit modification to the Hanford Site Wide Dangerous Waste Permit, Revision 8C, supporting PUREX Tunnel 2 grouting operations.
  - Provided Inspection Coordinator support to several regulatory agency inspections, including:
    - Permit writers visit to PUREX and B Plant (Ecology).
    - Diffuse and Fugitive Emission Units inspection in the 200 Area (Health).
    - Non-Financial Records Review inspection of B Plant (Ecology).
    - Non-Financial Records Review inspection of PUREX (Ecology).
    - Air Operating Permit (AOP) inspection of small combustion engines, including 100K Water Treatment Plant, and Central Waste Complex/Solid Waste Operations Complex light plants (Ecology).
- **Environmental Compliance and Quality Assurance**
  - Assessment Status
    - Completed Surveillance, *Management of Used Oil for Recycling at CHPRC*, on January 1, 2019, and resulted in three findings and two OFI.
    - Completed Surveillance, *PCB and Mercury Disposal During D4*, on January 30, 2019, and resulted in no findings or OFI.
    - Completed Surveillance, *Asbestos Removal and Disposition Process*, on January 31, 2019, and resulted in two findings and two OFI.

  - Completed Independent Assessment, *Hanford Analytical Services Quality Assurance Requirements Document Administrative Requirements*, on March 11, 2019, and resulted in no findings or OFI.
  - Completed Surveillance, *Compliance to the RAEL-FF-01 Air Emission License at B Plant and the Plutonium-Uranium Extraction (PUREX) Facility*, on March 6, 2019, which resulted in two findings and four OFI.
  - Completed Surveillance, *Surveillance of Pesticides/Herbicides Purchases and Sustainable Acquisition in Construction Contracts*, on March 29, 2019, and resulted in no findings or OFI.

- **Demonstrate active leadership and progress toward obtaining new Resource Conservation and Recovery Act (RCRA) Permit for the Hanford Site**
  - Facilitated and participated in the following meetings:
    - Weekly permit Project Management Team meetings.
    - Weekly permit meeting for Hanford contractors.
    - Weekly schedule strategy discussions with Ecology.
    - Biweekly schedule status meetings with RL, DOE Office of River Protection (ORP), Ecology, and contractors.
    - Monthly Tier 2 meeting with RL, ORP, and Ecology senior management.
  - Maintained the permit schedule.
  - Provided a detailed monthly schedule report and analysis for progress on the permit to Ecology, RL, ORP, and the contractors.
  - Provided tracking and status of open issues that are preventing progression of the permit.
  - Provided fulltime regulatory expertise and project management support.
- **Quality and timeliness of key documents submitted**
  - From January through March 2019, 65 environmental documents supporting various CHPRC projects were completed through EP&SP Publication Services. Publication Services was established to provide a systematic process for performing technical editing and formatting of environmental documents.
  - As part of continuous improvement, a lead author training was held on January 8, 2019, for representatives from various CHPRC projects and functions. The course focused on the topics of document planning, writing, and finalization along with resources and tools that are available to support authors.

Business Services

- **Supply Chain/Acquisitions:**
  - Completed reviews and white papers associated with the DOE Office of Inspector General (OIG) "Compilation of Challenges and Previously Reported Key Findings at the Hanford Site for Fiscal Years 2012-2018."
  - The W-135 Project updated procurement schedule for the capsule storage pad construction has been moved from a February 2019 award to a February 2020 award.
  - Completed the review process with the DOE Office of Small and Disadvantaged Business Utilization for a new mentor-protégé agreement. Transmitted approved agreement to RL for final approval.
  - Completed the technical evaluation of the Modeling and Risk Assessment proposals. Cost/price review to be performed in April, followed by RL consent and award by late June 2019. Expected award value is approximately $18 million over four years (base period plus four one-year options).
  - Started testing the Buyer's Technical Representative (BTR) Cost Acknowledgement System (BCAS) that will be used by BTRs to acknowledge MSA costs on a monthly basis and communicate any cost concerns or discrepancies.

- Coordinated the receipt of strategic sourcing savings for all DOE-EM prime contractors from the Integrated Contractor Purchasing Team (ICPT).
- Revised Equal Employment Opportunity statements in the General Provisions per recent feedback from the Department of Labor.
- Met with the Hanford Future Workforce Subcommittee to discuss the concept of apprentice utilization. The team invited procurement representatives from MSA, Washington River Protection Solutions LLC (WRPS), and CHPRC to discuss ways to increase the use of building trades (construction) apprentices. As a result, transmitted two apprentice communications to construction subcontractors. The first solicited feedback with regards to a possible apprentice utilization mandate. The second CHPRC/MSA/WRPS joint communication encouraged the use of building trade apprentices to build the future workforce at Hanford.
- Conducted the fourth BTR forum. Items that were discussed with BTRs included contract change management; procurement payment issues identified at MSA; management and delegation of CLTR time logs; and BTR Dashboard updates.
- Awarded a priced master agreement for engineering/technical support at 100K. Estimated value including options for fiscal year (FY) 2020 and FY2021 is $3.3 million.
- Issued a Sources Sought Announcement to solicit interested parties in performing subcontractor auditing services. Sources included the Best-In-Class (BIC) contracting structure under the One Acquisition Solution for Integrated Services (OASIS) with General Services Administration (GSA).
- Completed a WSA on Prime Contract Flowdown Requirements. Two OFI were noted associated with how prime contract requirements are reported through the supply chain and documentation in business process guides.
- Supported an Environmental Surveillance of herbicide and pesticide control within the procurement system that revealed no findings or observations.
- Developed the acquisition plan for the procurement of a skid-mounted ventilation system to support decontamination and decommissioning (D&D) efforts at REDOX.

- **Procurement:**
  - In the second quarter of FY2019, awarded/amended 443 contracts with a total value of $22.7 million. Additionally, awarded 585 new material purchase orders (PO) valued at $2.4 million to support ongoing project objectives.
  - At the end of 126 months of the CHPRC project, procurement volume has been significant: $2.85 billion in contract activity has been recorded with approximately 55.7 percent, or $1.59 billion, in awards to small businesses. These awards include 8,513 contract releases, 28,055 POs, and 321,021 PCard transactions.
  - Major contract awards:

Contract/ Release	Award Date	Awarded To	Title	Contract Type	Value ($M)
68245	1/2/2019	Meier Enterprises Inc dba Meier Architecture Engineering	W-135 Mockup Structure Design	T&M	$ 0.18
48772	1/7/2019	Stillwater LLC	Installation of Three Wells in the 200-UP-1 OU, FY19	FFU	$ 0.55
68439	1/15/2019	Hiline Engineering & Fabrication Inc	Fabricate A-, D-Cell Dam Assemblies	FFP	$ 0.16

Contract/ Release	Award Date	Awarded To	Title	Contract Type	Value ($M)
68354	1/24/2019	Gregg Drilling	Basic Ordering Agreement - Miscellaneous Well Drilling Services	FFP	Blanket Master
48768-14	1/31/2019	Carpenter Drilling	Two Dual Purpose Wells and Two Monitoring Wells in the 200-BP-5	FFU	$ .84
48768-16	2/20/2019	Carpenter Drilling	Installation of Five M-24 Monitoring Wells	FFU	$ .81
68759-1	3/6/2019	Perma-Fix Environmental Services, Inc.	Mixed Low Level Non-Thermal Treatment Services	FFU	$ .60
36883-94	3/7/2019	Ojeda	HR-3 FY19 Well Realignment Construction	T&M	$ .38
54177-89	3/20/2019	Intera Inc.	Cumulative Impact Evaluation Capability Development	T&M	$ .27
56537-42	3/20/2019	Terragraphics Environmental Engineering Inc.	PFP High Risk Management Assessment – Terragraphics	T&M	$ .10

- **Facilities & Property Management (F&PM):**
  - Procurement and setup planning for new six-wide and two-wide mobile offices (MO) near PUREX for CPRM continues. Delivery expected approximately the first week of July.
  - Relocation of three MOs from Research Technology Laboratory Project (Pacific Northwest National Laboratory in Richland) to B Plant is complete. Set up at B Plant to start March 28, 2019.
  - FY2019 Fixed Property Inventory campaign is complete.
  - FY2019 Personal Property Inventory Campaign is 40 percent complete.
  - Completed the duct smoke detector isolation in 2740W.
- **Finance:**
  - Continuing with the series of RL finance/contracting officer meetings to discuss and align topics identified in the CHPRC Incurred Cost Audit Corrective Action Plan for FY2009-2015.
  - Resubmitted FY2019 provisional rates updated for revised general and administrative (G&A) budgets and first quarter actuals.
  - Submitted Disclosure Statement Revision 10 incorporating language from the approved Accounting Practice Change APC-007 regarding the ERDF cost accumulation and billing methodology.
  - January-March month ends were completed with no cost suspensions.
  - Provided support for the FY2016 Incurred Cost Report Audit.
  - Provided support for FY2018 CR 4202 Property Recognition and Reporting.
  - Responded to data call regarding Statement of Federal Financial Accounting Standards (SFFAS) 54 (Leases) FY2018 Non-Federal Leases.
  - Submitted response for the FY2017 invoice assessment.
  - Provided support for the FY2018 invoice assessment.
  - Submitted the CY2018 Property Valuation Report.
  - Submitted the FY2019 Q1 International Transaction report.

- **Information Management:**
  - Processed 146,949 electronic records during the second quarter of FY2019 into the Integrated Document Management System (IDMS).
  - Continued work with MSA to disposition upgrade issues with desktop equipment in support of site Windows 10 upgrade project. To date, 653 workstations have been replaced or returned.

Prime Contract and Project Integration (PC&PI)

- **Project Management/Compliance Assessments**
  - The Change Control Board (CCB) coordinator facilitated the preparation and the disposition of seven baseline change requests (BCRs) in January, three BCRs in February, and four BCRs in March.
  - Assisted the PFP Closure Project to prepare the BCR to implement the revised RL-0011.C2 PFP Demolition Capital Asset Project Performance Measurement Baseline (PMB) approved by RL on January 9, 2019. Assisted the initiation of a second BCR to draw RL contingency for the RL-0011.C2 PFP Demolition Capital Asset Project to address impacts from loss of HAMTC-represented employees to other Hanford contractors, unplanned harsh winter weather, and stop works that occurred after the development of the revised RL-0011.C2 Project PMB.
  - Supported CHPRC preparations required for the transition to the Central Plateau Closure Contract contractor. This included researching and providing documentation from past Hanford Site prime contractor transitions to be used as background information, as well as working with the projects to provide a summary forecast of work status at the end of FY2019 and work anticipated in FY2020, and providing input to the initial rough draft of the transition plan.
  - Completed development of CHPRC's draft responses to five of the historical DOE OIG audits identified in the Special Report, DOE-OIG-10-04, *Compilation of Challengers and Previously Reported Key Findings at the Hanford Site for Fiscal Years 2012-2018*, issued November 2, 2018.
  - In response to requests from the projects, updated the CHPRC two-day Course 600217, Earned Value Management System Training, reviewed the updated version with the project control directors for comments, and initiated finalization of the update.
- **Prime Contract Compliance (PCC):**
  - January through March, PCC received and processed 10 contract modifications (684, 687-695) from RL.
  - The Correspondence Review Team received and determined the distribution and assignment for 176 incoming letters/documents. PCC reviewed 92 outgoing correspondence packages.
  - Submitted CHPRC-1802925AR5 – "Contract Number DE-AC06-08RL14788 – Proposed Plan and Cost Impacts for Regulator Access to the Integrated Document Management System, Tri-Party Agreement Milestone."
  - Submitted CHPRC-1804133 – "Contract Number DE-AC06-08RL14788 – Request for Relief of Additionally Imposed Testing for Canister Storage Building AH-004 Duct System."
  - Submitted CHPRC-1803578AR3 – "Contract Number DE-AC06-08RL14788 – Transmittal of Proposal Number CP ALL PRC 1710, Revision 0, Addendum 001 for Plateau Remediation Contract Extension, Period October 1, 2018."
  - Submitted CHPRC-1900106 – "Contract Number DE-AC06-08RL14788 – Notification of Differing Site Condition – Active Leak from Reduction-Oxidation Silo Tank 604 and Significant Retained Liquid.
  - Submitted CHPRC-1900478 – Contract Number DE-AC06-08RL14788 – Notification of Potential Impacts due to Government Shutdown December 23, 2018, through January 26, 2019."
  - Submitted CHPRC-1900261AR3 – "Contract Number DE-AC06-08RL14788 – Transmittal of Change Proposal Number CP ALL PRC 1710, Revision 0, Addendum 002, For Fiscal Year 2019 10 Code of Federal Regulations 851 Technical Amendment Scope."

- Submitted CHPRC-1900941 – "Contract Number DE-AC06-08RL14788 – Notification of Potential Impacts due to Severe Weather."

- **Project Integration**
  - Project Support, Systems Integration & Schedule Integration
    - Responded to request from the Business Management Systems upgrade team for detailed requirements for the Business Intelligence Reporting Platform, which included prioritizing requirements and comments regarding CHPRC specific and/or critical needs; attended outbrief of recommendations for path forward.
    - Provided DOE-RL with a list of new capital items to include General Plant Projects; Capital Equipment Not Related to Construction, and line items (LI) that are planned in FY2021 in support of FY2021 budget planning.
    - A spend forecast review for the first quarter of FY2019 was held in January with project managers, project controls directors/managers, and RL managers and project controls officers to status and discuss performance and spending forecast through December 2018.
    - In preparation for upcoming FY2019 DOE financial statement audit, information technology (IT), Cobra and Premavera applications were reviewed and validated for Application Level General Controls, which includes review of the applications for security management, access controls, configuration management, segregation of duties, and contingency planning.
  - 000 Project EVM Support & Reporting:
    - Issued three months of CHPRC Monthly Performance Reports to RL.
    - Submitted the December, January, and February Gold Metrics to RL.
    - Submitted Facility Information Management System FY2019 required maintenance cost to MSA.
    - Completed safety hour reporting each month.
    - Compiled integrated project team (IPT) and monthly project review packages for December, January, and February.
- **Project Support Services**
  - Risk Management:
    - Supported project risk reviews and updated risk registers.
    - Attended project kickoff meetings for Post Contract Baseline update deliverable and presented risk-specific activities to include in the process. Initiated meetings with projects early in the process to capture potential risks for FY2020 work scope and identified keys risks for FY2021 and FY2022 work scope.
    - Conducted monthly assessments of the status of key project risks and risk impacts associated with BCRs.
  - Estimating & Program Support
    - Submitted Addendum 001 for CP ALL PRC 1710 - Plateau Remediation Contract Extension, Period October 1, 2018, Through September 30, 2019, to RL on January 17, 2019. The addendum includes FY2019 additional authorized scope in RL-0030, RL-0040, and RL-0041, and had an estimated value of $23.7 million without fee.
    - Submitted Addendum 002 for CP ALL PRC 1710 - Plateau Remediation Contract Extension, Period October 1, 2018, Through September 30, 2019, on March 18, 2019. The addendum includes FY2019 10 Code of Federal Regulations 851 Technical Amendment scope in RL-0030, RL-0040, and RL-0041, and had an estimated value of $4.3 million without fee.
    - Provided responses to two RFI from RL on CP ALL PRC 1710 - Plateau Remediation Contract Extension, Period October 1, 2018, Through September 30, 2019.
    - Presented the estimating portion of the FY2020 PCB kickoff meeting.
    - Delivered a FY2020 PCB roadshow presentation to each project, outlining the implementation of successes and best practices noted from the FY2019 PCB submittal and changes to standardize the process using templates for uniform data submittal to improve the

consistency of the data, to reduce omissions and errors, and ensure the deliverable date is met.

Resource Management and Strategic Integration

- **Human Resources (HR):**
  - Canceled the Interim Management Directive and published procedure PRO-HR-073 Personal Time Bank and Other Absences on January 30, 2019, after receiving DOE approval.
  - Initiated process improvement with use of tablets to support HR Project Services Representatives with field work (e.g. investigations).
  - Continued to participate in vendor presentations/meetings in support of new site-wide Business Management System.
  - Issued letter to RL documenting completion of contract deliverable H.2(h)(13) – Itemization of Costs Incurred for Plan Administration.
  - Completed and transmitted to RL (via iBenefits) the annual workforce restructuring information.
  - Submitted annual Equal Employment Opportunity (EEO) EEO-1 Report.
  - With Communications support, developed a diversity graphic/logo to use on future CHPRC communications regarding EEO/diversity efforts.
  - Attended Public Hearing, along with Labor Relations, on Washington State Paid Family Medical Leave to understand requirements and impact of new requirements.
  - CHPRC received our first "Observe & Report" resulting from the new traffic safety initiative and took appropriate actions.
  - Attended Closeout Planning meeting with RL contracting officer in preparation for the end of contract.
  - Completed Kaizen of investigation and discipline process—working actions associated with process improvements.
  - Preparing for upcoming Office of Federal Contract & Compliance Program audit scheduled for the week of April 22, 2019.
- **Staffing and Development:**
  - Initiated first of continuing Conflict Resolution training sessions.
  - Onboarded 30 D&D workers January 28, 2019, to support Plutonium Finishing Plant (PFP) and Central Plateau Risk Management (CPRM) work scope.
  - Hired approximately 25 RCT trainees to support project work and address future generation workforce needs due to anticipated attrition.
  - Performed Kaizen of staffing and recruitment process - working actions associated with process improvements.
- **Labor Relations (LR):**
  - Following is a list of grievances in the arbitration process and their status:
    - Resolved during reporting period and arbitration cancelled:
      - PRC-017-010 – union claiming employee should have been paid between times when ready to return to work and when started with Mission Support Alliance, LLC (MSA). Status: Union withdrew grievance.
      - PRC-017-040 – union claiming exempt performed excessing of material. Status: Parties reached settlement agreement.
      - PRC-017-052 – union claiming termination is not just. Status: Union withdrew grievance.
      - PRC-018-025 – union claiming exempt performing surveillance work. Status: Parties reached settlement agreement.
      - PRC-018-044 – job abandonment. Status: Parties reached settlement agreement.
    - Scheduled arbitrations:
      - PRC-017-042 – union grieving company's closure of the Plastic Shop at PFP. Status: Arbitration rescheduled for June 12, 2019.

    - PRC-018-001 – union claiming jurisdiction of demobilization activities on Davis-Bacon work site. Status: Arbitration scheduled for June 6, 2019; company has requested that union put similar grievances (PRC-018-024 & PRC-018-039) in abeyance pending outcome of this arbitration.
    - PRC-018-010 – discipline. Status: Arbitration scheduled for September 25, 2019.
    - PRC-018-013 – discipline. Status: Arbitration scheduled for August 14, 2019.
    - PRC-018-021 – applying fixative. Status: Arbitration scheduled for July 24, 2019.
    - PRC-018-037 – company establishing supervisory work groups without following seniority. Status: Arbitration scheduled for October 24, 2019.
    - PRC-018-043 – job abandonment. Status: Arbitration scheduled December 4, 2019.
  - The following grievance has been requested by Hanford Atomic Metal Trades Council (HAMTC) to move to arbitration but pending arbitration date:
    - PRC-018-011 and PRC-018-026 (Tumbleweed Removal).
  - Worked with HAMTC to resolve jurisdictional issues between Local 12-369 and United Association (UA) Local 598 regarding work at the K Basin projects.
- **Interface Management:**
  - Canister Storage Building (CSB) fire pump formally downgraded to a service water system, reducing maintenance liability for the facility.
  - Supported the isolation of 2740W smoke detectors from the alarm system, addressing a Fire Systems Maintenance liability.
  - Formally re-established the water utility demarcations at the first off-valve from a facility/building. The CHPRC/MSA Water System Interface Control Document will be updated to reflect this agreement.
  - Facilitated communications and documented agreement between IDF, PUREX, and WRPS management to allow WRPS to remove soil from IDF spoil pile and transport to the 622-S Lysimeter site for a soils study.
  - Issued Administrative Interface Agreement, Usage of Non-Regulated Guzzler Filter Vacuum Trucks and the Regulated Guzzler Filter Vacuum Truck, HNF-46089, Revision 1.
  - Provided CHPRC population data to MSA for use in the development of the Infrastructure Services and Alignment Plan.
  - Coordinated with MSA work control, maintenance and CHPRC Facilities and Property management (FP&M) to increase efficiency in real response to basic maintenance requests. The outcome included adding F&PM personnel to the "RAM" (rapid action) team meetings and identifying a work control scheduler as single POC for CHPRC General Purpose maintenance to help expedite response.
  - Provided information to MSA on fixed assets and mobile offices coming up for deactivation/demolition in the next 10 years to support electrical distribution upgrade project planning.
- **Strategic Management:**
  - Completed the development of a Plateau 10-year strategic plan to and presented to RL senior management.
  - Provided first quarter updates of the FY2019 Integrated Priority List to RL.
  - Completed update to RL Project Risk Evaluation Matrix and informally transmitted to RL on February 28, 2019.
  - Continued participation in the IPT for the Hanford Life Cycle Cleanup Baseline development.
  - Provided CHPRC population data to MSA for use in the development of the Infrastructure Services and Alignment Plan.

Project Technical Services (PTS)

- Training and Procedures

- Teamed with program and project subject matter experts to implement new training requirements from revision 4 of DOE-0359, *Hanford Site Electrical Safety Program (HSESP)*. This change required documentation of education/training adequacy for all new and existing electricians, instrument technicians, and their supervisors.
- Published PRC-STD-TQ-40201, *CH2M HILL Plateau Remediation Company Training Implementation Matrix (TIM)*, following DOE approval. This revision was a major rewrite and included changing the periodic review frequency from five to two years to close an associated corrective action.
- Performed a dry run of the new Integrated Hazard Analysis course materials for the PTS EZAC. Received positive and constructive feedback to use to refine the presentation. Rollout to PTS employees planned for February.
- Prepared a training presentation for new course 600345, *CHPRC Fire Extinguisher Inspection Training*. This training is needed for compliance with new National Fire Protection Association 70E training requirements.
- Completed pilot of new training course 600900, *Integrated Hazard Analysis*, with the PTS Training and Procedures group. This new course provides students with a high-level understanding of how layers of protection are applied to protect the people, equipment, and environment. Next phase of implementation will be the rest of the PTS organization.
- Designed and developed Conduct of Work overview computer-based training. This training course will be required for all CHPRC personnel and subcontractors as initial exposure to the seven Conduct of Work principles.

- Operations Program
  - Supported the system isolation training instruction for electrical, instrumentation, and pumps fundamentals modules. This training is being provided to Field Work Supervisors (FWS) from CPRM, S&GRP, and WFMP in support of the Hazardous Energy Control Corrective Action Plan.
  - Worked with OS&IH to develop and approve an Industrial Health Engineering Association (IHEA) for level 2 maintenance procedures to address chemical and high noise levels during equipment calibrations.
  - Resolved skill based determination for maintenance procedures based on results of the IHEA.
  - Supported the system isolation training instruction for Design Media and the Practical modules. This training is being provided to FWSs from CPRM, S&GRP, and WFMP in support of the Hazardous Energy Control Corrective Action Plan.
  - Conducted the Hazardous Energy Control Technical Review Board meeting for February. Very good participation by the Project COAs in sharing lessons learned and issues.
  - Conducted the quarterly Work Control Manager meeting.
  - Submitted consolidated Conduct of Operations Applicability Matrix to DOE for approval.
  - Completed Controlling Organization Administrators (COA) gap training for all CHPRC qualified COAs – initiative from hazardous energy control corrective action plan.
  - Established a subcontract and staffed for performance of Hazardous Energy Control corrective action plan effectiveness review.
  - Reviewed hazard analysis process to identify improvements in streamlining controls from permits/plans to ensure controls are activity specific (support of FWS burden reduction initiative).
- Readiness and Preparedness
  - Completed second Quarter Emergency Preparedness assessment with no issues noted.

Communications:

- Communications supported RL in proactive and reactive media stories:
  - Tri-City Herald (February 13, 2019) - Watch a time lapse of Hanford Site snow storms.
  - EM Newsletter (March 5, 2019) - Project Management Institute Recognized Hanford Sludge Removal Project.

  - EM Newsletter (March 26, 2019) - Underwater Camera Allows Remote Look at Radioactive Debris at Hanford.
  - EM Newsletter (April 2, 2019) - Students Visit Hanford Mock-up to Learn About STEM Career Opportunities.
  - EM Newsletter (April 9, 2019) EM Assistant Secretary Meets with Hanford Workers, Views Cleanup Progress.
  - KVEW-TV (April 9, 2019) - Demolition of Hanford's Plutonium Finishing Plant to restart soon.
- Communications supported RL in the development of social media posts featuring:
  - 324 Building Progress.
  - Soil and Groundwater Progress.
  - Project Management Institute Columbia River Basin Chapter's Project of the Year.
  - Lighting installation at the Waste Encapsulation and Storage Facility.
  - Entering the Reduction Oxidation Facility's canyon for the first time in 21 years.
  - PUREX Tunnel 2 Stabilization.
  - Lower-risk demolition work at PFP.

MAJOR ISSUES

In accordance with performance measure PM-00-1-18, CHPRC reports the below issues potentially affecting the completion of individual outcomes and the overall success of the contract, as well as actions taken or recommended to resolve those issues.

Issue	Recommendation
No business system issues currently identified. Please see the Overview for contract alignment issue status.	N/A

PROJECT BASELINE PERFORMANCE
Current Month
($M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)
Office of the President	0.2	0.2	.02	0.0	0.0%	(0.0)	-9.7%
Engineering	0.2	0.2	.01	0.0	0.0%	0.1	38.7%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	0.1	44.5%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	15.3%
Communications & Outreach	0.1	0.1	0.1	0.0	0.0%	0.0	1.6%
Safety, Health, Security, and Quality	1.3	1.3	1.2	0.0	0.0%	0.1	7.2%
Environmental Program and Strategic Planning	0.3	0.3	0.4	0.0	0.0%	(0.0)	-4.8%
Business Services	2.7	2.7	2.5	0.0	0.0%	0.2	6.5%
Prime Contract and Project Integration	0.6	0.6	0.5	0.0	0.0%	0.1	16.7%
Resource Management and Strategic Integration	0.6	0.6	0.5	0.0	0.0%	0.1	10.2%
Project Technical Services	0.5	0.5	0.5	0.0	0.0%	0.0	2.3%
Indirect WBS 000 Total	**6.7**	**6.7**	**6.2**	**0.0**	**0.0%**	**0.5**	**8.1%**

Numbers are rounded to the nearest $0.1 million.

Indirect WBS 000

CM Schedule Performance: (+$0.0M/+0.0%)
The variance is within reporting thresholds.

CM Cost Performance: (+$0.5M/+8.1%)
The current month positive cost variance is a result of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities in March, where non-essential personnel were advised not to report to work. Also contributing is less labor cost than budgeted due to open vacancies.

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

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)	Budget at Completion (BAC)
Office of the President	0.9	0.9	0.9	0.0	0.0%	0.0	4.1%	2.0
Engineering	0.9	0.9	0.7	0.0	0.0%	0.2	22.0%	1.9
Internal Audit	0.8	0.8	0.5	0.0	0.0%	0.3	35.2%	1.6
General Counsel	0.8	0.8	0.5	0.0	0.0%	0.2	32.4%	1.6
Communications & Outreach	0.5	0.5	0.5	0.0	0.0%	0.0	7.6%	1.2
Safety, Health, Security and Quality	7.5	7.5	6.8	0.0	0.0%	0.6	8.3%	16.1
Environmental Program and Strategic Planning	2.2	2.2	2.1	0.0	0.0%	0.1	6.6%	4.8
Business Services	15.8	15.8	14.9	0.0	0.0%	0.9	5.4%	33.7
Prime Contract and Project Integration	3.6	3.6	3.2	0.0	0.0%	0.4	10.4%	7.7
Resource Management and Strategic Integration	3.3	3.3	2.7	0.0	0.0%	0.6	18.9%	7.0
Project Technical Services	3.1	3.1	3.0	0.0	0.0%	0.0	1.1%	6.6
Indirect WBS 000 Total	**39.2**	**39.2**	**35.8**	**0.0**	**0.0%**	**3.4**	**8.7%**	**84.1**

Numbers are rounded to the nearest $0.1 million.

Indirect WBS 000
FYTD Schedule Performance: (+$0.0M/+0.0%)
The variance is within reporting thresholds.

FYTD Cost Performance: (+$3.4M/+8.7%)
The positive cost variance is attributable to less labor cost than budgeted due to open vacancies, project needs, as well as unplanned absences at a rate higher than expected. Work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities in February and March also contributed to the variance. Additionally, user based services have trended lower due to fewer requests for desktop support and facility maintenance.

FY2019 G&A Analysis
($M)

WBS 000 Project Services and Support	FY 2019 FYTD BCWS	FYTD Actual	FYTD Variance (O)/U		FY 2019 BCWS	FY 2019 Forecast	FY 2019 Variance (O)/U
General & Administrative (G&A)	**39.2**	**35.8**	**3.4**		**84.2**	**81.7**	**2.4**
Office of the President	0.9	0.9	0.0		2.0	2.1	(0.1)
Engineering	0.9	0.7	0.2		1.9	1.5	0.3
Internal Audit	0.8	0.5	0.3		1.6	1.1	0.6
General Counsel	0.8	0.5	0.2		1.6	1.4	0.3
Communications	0.5	0.5	0.0		1.2	1.1	0.0
Safety, Health, Security and Quality	7.5	6.8	0.6		16.1	15.5	0.6
Env. Program & Strategic Planning	2.2	2.1	0.1		4.8	4.7	0.1
Business Services	15.8	14.9	0.9		33.7	32.3	1.4
Prime Contract and Project Integration	3.6	3.2	0.4		7.7	7.7	(0.0)
Resource Mgmt & Strategic Intg	3.3	2.7	0.6		7.0	6.7	0.3
Project Technical Services	3.1	3.0	0.0		6.6	7.5	(0.9)

	FY 2019	
G&A Distribution	**(34.6)**	**(81.3)**
G&A Liquidation (Over)/Under	**1.2**	**0.4**

Liquidation Analysis

For March, after a January passback of $2.5 million, the application of the G&A rate has under liquidated total to date G&A cost by $1.2 million. The FY2019 year end projected under liquidation of $0.4 million reflected in the fiscal year spend forecast reflects a projected decrease in G&A costs as well as a decrease to the G&A base.

Consistent with CHPRC prospective Cost Accounting Disclosure Statement, under liquidations would be distributed to users at a minimum, when the combined projected year end under liquidation is equal to or greater than $4 million. Over liquidations would be distributed to users at a minimum, when the combined projected year end over liquidation is equal to or greater than $6 million. Variances may be liquidated to users at lower thresholds if variances are determined to be significant to cost control. All remaining variances will be distributed at fiscal year end.

Appendix C
Capital Asset Projects

CH2MHILL
Plateau Remediation Company

J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

Appendix C.1
Capital Asset Project
RL-0011.C1 - PFP D&D
(Removal of 174 Gloveboxes from 234-5Z)

CH2MHILL
Plateau Remediation Company

J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress has been temporarily put on hold for work associated with critical decision (CD)-4 closure to remove the final glovebox from the 234-5Z Facility during demolition. The remaining glovebox (HA-46) has been staged until the area of the 234-5Z Facility is demolished. The total gloveboxes removed to date is 173 and is 99 percent complete.

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

Key Metrics	*Current Month Plan*	*Current Month Actuals*	*Cumulative Plan*	*Cumulative Actuals*
Glovebox/Hood Removed	-	0	174	173
COMPLETE KPP Rooms/Areas Ready for Demo	-	0	72	72 rooms/areas

KEY ACCOMPLISHMENTS

RL-0011_C1 Accomplishments:

- The project is on hold pending completion of lower-risk demolition. Glovebox HA-46 will be removed during higher-risk demolition.

MAJOR ISSUES

Issue:
The PFP project has realized a loss of approximately 30 D&D workers due to opportunities provided by the Labor Asset Management Program offering Nuclear Chemical Operator (NCO) positions across the Hanford Site. Ten of the D&D workers transferred to Washington River Protection Solutions, LLC (WRPS) in December, 10 in January, and eight in March. The loss of trained and qualified workers caused a schedule loss of 10 weeks to the PFP project.

Corrective Action:
Work with Labor Relations and Human Resources to fill needed positions.

Status:
In response to the loss of staff and possible additional attrition, PFP has hired 41 D&D workers who will complete classroom training at Volpentest HAMMER Federal Training Center in north Richland with field mentoring training activities to follow. The first group of 31 D&D workers began training on December 3, 2018, and completed field mentoring training activities January 24, 2019. The second group of 10 D&D workers began training on January 28, 2019, and will finish field mentoring training activities March 28, 2019. To prepare new hire D&D workers for safe work activities at PFP, experienced workers and managers have been dedicated to bring new staff up to speed to resume demolition and debris loadout. Furthermore, an additional eight postings are expected to occur in the future. With the completion of training for the second set of new workers, this issue will be closed.

Issue:
The project lacks adequate Radiological Control Technicians (RCTs) to complete work package development, mockups, and field work activities. Efforts to employ adequate RCTs, via contract or

otherwise, have been exhausted. The project has not realized planned staffing support for ongoing activities at PFP.

Corrective Action:
CHPRC has teamed with WRPS to hire and train RCTs to fulfill sitewide resource needs.

Status:
The teaming companies have performed initial screening/aptitude testing of applicants. Development of the RCT training course has been completed and the selected candidates began training on March 11, 2019. Allocation of RCT resources is subject to the availability and needs of the company at the time of training completion, later this summer. Based on the start of training, this issued will be considered closed.

Issue:
Harsh weather has impacted PFP's ability to complete scheduled debris disposition activities. Additionally, in February, there were a significant number of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities, where non-essential personnel were directed not to report to work.

Corrective Action:
The project has set up an acount to collect weather impacts and will pursue a baseline change request (BCR) to drawdown RL contingency to address the realization of this risk.

Status:
Work crews normally supporting decontamination and demolition activities have been reassigned to snow removal and weather mitigation activities. Demolition activities will resume after conditions improve. Better weather in March allowed resumption of debris disposition, and a BCR to be processed in April will close this issue.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011/WBS-011.05.01.01.06 (CAP.1)				
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No critical risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				

CRITICAL PATH SCHEDULE

The PFP Critical Path Schedule begins with debris disposition of the 234-5Z rubble piles, starting with the frontside waste. Once the waste debris is loaded out, demolition will resume on the remaining sections of Zones 2 and 7, with the exception of the drain line. Remote Mechanical C (RMC) process line and Remote Mechanical A (RMA) process line demolition will begin after a second MA is completed, and concurrence granted by RL to resume higher-risk demolition activities. Working in parallel with RMA and RMC will be the completion of the basement of 234-5Z demolition and removal of HA-46. This leads to CD-4 declaration and confirmation of the completion worksheet. The CD-4 closeout completion milestone is scheduled for November 11, 2019.

SCHEDULE MARGIN/MANAGEMENT RESERVE

Reference: Appendix C.1 Formats 1, 2, 3, and 5 for specific schedule margin/management reserve utilization for this CAP.

CRITICAL DECISION MILESTONE STATUS

Number	Title	* Due Date	**Forecast Date	Status/ Comment
CAP.1	Removal of 174 gloveboxes from 234-5Z	11/30/2017	11/11/2019	The PFP project realized a loss of two weeks due to unanticipated winter weather in early March. The CAP 1 project forecasted completion date has slipped to November 11, 2019.

*Due date reflects CD-4 due date with DOE contingency.
**Forecast Date reflects CD-4 due date without DOE contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Nothing to report at this time.

DOE ACTIONS / DECISIONS

Working with RL on CD-4 closure actions. CD-4 closure date of November 30, 2017, was not met.

Appendix C.1
RL-0011.C1 – PFP D&D
(Removal of 174 Gloveboxes from 234-5Z)
Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis

CH2MHILL
Plateau Remediation Company

J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC07-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 1 - WORK BREAKDOWN STRUCTURE

DOLLARS IN Thousands of $

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT	3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract	a. NAME RL_0011_C1 - PFP D&D (ARRA/Base)	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO *(YYYYMMDD)* 2019 / 03 / 24
	c. TYPE CPAF / d. SHARE RATIO	c. EVMS ACCEPTANCE NO X YES *(YYYYMMDD)* 2009 / 09 / 18	

5. CONTRACT DATA

a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS *(YYYYMMDD)*
1	330,987	0	9,878	340,865	344,857	340,865	344,857	

6. ESTIMATED COST AT COMPLETION

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	332,586		
b. WORST CASE	334,991		
c. MOST LIKELY	334,979	330,987	-3,992

7. AUTHORIZED CONTRACTOR REPRESENTATIVE

a. NAME (Last, First, Middle Initial): Underwood, Teresa

b. TITLE: Prime Contract Compliance Manager

c. SIGNATURE

d. DATE SIGNED *(YYYYMMDD)*

8. PERFORMANCE DATA

CAPN.PBS Control Account.PARS 2 WBS (2) ITEM (1)	CURRENT PERIOD BUDGETED COST WORK SCHEDULED (2)	CURRENT PERIOD BUDGETED COST WORK PERFORMED (3)	CURRENT PERIOD ACTUAL COST WORK PERFORMED (4)	CURRENT PERIOD VARIANCE SCHEDULE (5)	CURRENT PERIOD VARIANCE COST (6)	CUMULATIVE TO DATE BUDGETED COST WORK SCHEDULED (7)	CUMULATIVE TO DATE BUDGETED COST WORK PERFORMED (8)	CUMULATIVE TO DATE ACTUAL COST WORK PERFORMED (9)	CUMULATIVE TO DATE VARIANCE SCHEDULE (10)	CUMULATIVE TO DATE VARIANCE COST (11)	REPROGRAMMING ADJUSTMENTS COST VARIANCE (12a)	REPROGRAMMING ADJUSTMENTS SCHEDULE VARIANCE (12b)	REPROGRAMMING ADJUSTMENTS BUDGET (13)	AT COMPLETION BUDGETED (14)	AT COMPLETION ESTIMATED (15)	AT COMPLETION VARIANCE (16)
RL-0011 Nuclear Mat Stab & Disp PFP																
RL_0011_C1.02 Maintain Safe & Compliant PFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RL_0011_C1.05 Disposition PFP Facility	0	0	0	0	0	235,514	235,495	259,792	-19	-24,296	0	0	0	235,514	259,799	-24,284
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														0	0	0
e. SUBTOTAL	0	0	0	0	0	315,152	315,133	332,579	-19	-17,446	0	0	0	315,152	332,586	-17,434
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	0	0	0	0	0	315,152	315,133	332,579	-19	-17,446	0	0	0	317,545		

9. RECONCILIATION TO CONTRACT BUDGET BASELINE

a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									-19	-17,446				317,545	332,586	-15,041

*CPR Format 1 displays fully burdened dollars which includes indirect G&A that is distributed to each Project

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 2 - ORGANIZATIONAL CATEGORIES

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

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME RL_0011_C1 - PFP D&D (ARRA/Base)	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2019 / 03 / 24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	YES: X *(YYYYMMDD)* 2009 / 09 / 18

5. PERFORMANCE DATA

WBS.Resp Org Group	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE							
ITEM	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
35 - Business Services	0	0	0	0	0	60,427	60,427	52,580	0	7,847	0	0	0	60,427	52,580	7,847
3B - PFP Closure Project	0	0	0	0	0	254,725	254,706	279,999	-19	-25,293	0	0	0	254,725	280,006	-25,281
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL *(Performance Measurement Baseline)*	0	0	0	0	0	315,152	315,133	332,579	-19	-17,446	0	0	0	315,152	332,586	-17,434
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	0	0	0	0	0	315,152	315,133	332,579	-19	-17,446	0	0	0	317,545		

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE			DOLLARS IN THOUSANDS	Form Approved OMB No. 0704-0188
1. CONTRACTOR	2. CONTRACT		3. PROGRAM RL_0011_C1 - PFP D&D (ARRA/Base)	4. REPORT PERIOD
CH2M HILL Plateau Remediation Company	a. NAME: Plateau Remediation Contract		a. NAME: Plateau Remediation Contract	a. FROM: 2019/02/25
b. LOCATION:	b. NUMBER: RL14788		b. PHASE	b. TO: 2019/03/24
Richland, WA	c. TYPE: CPAF		c. EVMS ACCEPTANCE	
	d. SHARE RATIO:		NO YES X 9/18/2009	

5. CONTRACT DATA

a. ORIGINAL NEGOTIATED COST	b. NEGOTIATED CONTRACT CHANGE	c. CURRENT NEGOTIATED COST (A + B)	d. ESTIMATED COST AUTH UNPRICED WORK	e. CONTRACT BUDGET BASE (C + D)	f. TOTAL ALLOCATED BUDGET	g. DIFFERENCE (E - F)
330,987	$0	$330,987	$0	$330,987	$317,545	$13,442

h. CONTRACT START DATE	i. DEFINITIZATION DATE	j. PLANNED COMPL DATE	k. CONT COMPLETION DATE	l. EST COMPLETION DATE
6/19/2008	6/19/2008	9/30/2019	9/30/2019	9/30/2019

6. PERFORMANCE DATA — BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	SIX MONTH FORECAST +1 Apr-19	+2 May-19	+3 Jun-19	+4 Jul-19	+5 Aug-19	+6 Sep-19	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	UNDISTRIB BUDGET	TOTAL BUDGET
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
a. PM BASELINE																	
(BEGIN OF PERIOD)	**315,152**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**302,288**	**4,109**	**7,749**	**890**	**116**	**0**	**0**	**0**	**315,152**
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																	
None at this time.																	**0**
c. PM BASELINE (END OF PERIOD)	**315,152**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**302,288**	**4,109**	**7,749**	**890**	**116**	**0**	**0**	**0**	**315,152**
7. MANAGEMENT RESERVE																	**2,393**
8. TOTAL																	**317,545**

CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING

Dollars in: FTE

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME RL_0011_C1 - PFP D&D (ARRA/Base)	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2019 / 03 / 24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	YES: X *(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)* SIX MONTH FORECAST BY MONTH *(Enter names of months)* +1 APR 2019 (4)	+2 MAY 2019 (5)	+3 JUN 2019 (6)	+4 JUL 2019 (7)	+5 AUG 2019 (8)	+6 SEPT 2019 (9)	ENTER SPECIFIED PERIODS OCT 2019 (10)	NOV 2019 (11)	DEC 2019 (12)	FY20-LC (13)	ATCOMPLETE (14)	AT COMPLETION (15)
35 - Business Services	0	17	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project	0	15441	0	0	0	0	0	0	0	0	0	0	0	15442
g. TOTAL DIRECT	0	15458	0	0	0	0	0	0	0	0	0	0	0	15459

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 5 - Explanations and Problem Analysis

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM		4. REPORT PERIOD
a. NAME	a. NAME		a. NAME		a. FROM (YYYYMMDD)
CH2M HILL Plateau Remediation Company	Plateau Remediation Contract		MPB - RL_0011_C1 - PFP D&D (ARRA/Base)		2019/02/25
b. LOCATION (Address and ZIP Code)	b. NUMBER		b. PHASE		b. TO (YYYYMMDD)
Richland, WA	RL14788				
	c. TYPE	d. SHARE RATIO	c. EVMS ACCEPTANCE		
	CPAF		No X Yes (YYYYMMDD)	2009 / 09 / 18	2019/03/24

Direct Projects

5. Evaluation	Budget	Earned	Actuals	SV in $	SV in %	CV in $	CV in %	SPI	CPI
Current:	0	0	0	0	0	0	0	0	0
Cumulative:	315,152	315,133	332,579	-19	0.0%	-17,446	-5.5%	1.00	0.95
	BAC	EAC	VAC in $	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	315,152	332,586	-17,434	-5.5%	0	2.74			

Explanation of Variance/Description of Problem:
Current Period:
Schedule Variance: The schedule variance is within threshold.
Cost Variance: The current month cost variance is within threshold.

Cumulative To Date:
Schedule Variance: Within Threshold
Cost Variance: Within Threshold

Impact:
Impact: The RL-011.C1 project baseline completion date is November 19, 2016. The current schedule reflects a completion date of November 11, 2019.

The current RL-11 performance schedule indicates that the Plutonium Finishing Plant (PFP) project will achieve slab-on-grade by October 2019. The regulators were notified in advance that the PFP Project would not meet the re-negotiated Tri-Party Agreement (TPA) milestone M-083-00A due date of September 30, 2017, for achieving slab-on-grade. In addition, the December 30, 2017, CD-4 date was not achieved. The PFP project realized a twor week slip in March 2019, due to later than expected harsh winter weather. Work crews normally supporting demolition activities were reassigned to snow removal and weather mitigation activities.

Cost Impact: The historical negative cost variance of ~$17.4M and 5.5%, and CPI of .95 reflect impacts of the safety pauses, stop works, contamination events, and increased complexity of the HA-9A/HC-9B size reduction efforts and preparations and removal of the HA-7A, HC18M and HC-7C and 227S and 227T gloveboxes. This is partially offset by recognized efficiencies in cleaning up the RMA/RMC control rooms after completion of the size reduction efforts of the 9A/9B gloveboxes and removal of the three RADTU and HA-46 gloveboxes by demolishing them with the 234-5Z facility.

Cost variance is not considered recoverable as there is only a small amount of scope remaining to complete the KPP.

Corrective Action:
None at this time

Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):
1. Schedule Margin Analysis: There is no schedule margin associated with the RL-011.C1 capital asset account.
2. IMS Data dictionary Changes: None in the month of March
3. Forecast Schedule with No Baseline: None in the month of March
4. UB Balance: None in the month of March
5. Negative ACWP: Negative ACWP is related to timecard corrections for prior month mischarges.
6. EAC Analysis: Best Case = $332,586; Most Likely = $334,979; Worst Case = $334,991. The Best Case 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 Case EAC is the ACWP plus the ETC 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.
7. Negative CV > VAC: Scope to perform size reduction efforts on the high gram glovebox removal efforts was estimated to be completed in a much shorter time frame with much fewer resources than originally planned causing the large cost variance. The EAC is reflective of the current approach to perform the remaining work scope.
8. MR Transactions: None in the month of March
9. Freeze Period Changes: None in the month of March
10. Retroactive Changes: None in the month of March
11. EVT Changes: None in the month of March

Prepared by: Jason Knowlton **4/22/2019** **Approved by:** **Date:**

Appendix C.2
Capital Asset Project
RL-0011.C2 - Demolition of PFP Facilities

CH2MHILL
Plateau Remediation Company

J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Loadout of existing 234-5Z Facility debris continued in March after a slow start due to continued harsh winter weather in the beginning of the month. This has caused an additional two week slip in schedule. Approximately 85 percent of the existing debris pile has been shipped to the Environmental Restoration Disposal Facility (ERDF) for disposal. Low-risk demolition is scheduled to resume in April. Planning continues for the higher-risk demolition forecasted to begin in July 2019 and preparations for a second Management Assessment (MA), including the validation of evidence and mock interviews, are in process.

Key Metrics	*Current Month Plan*	*Current Month Actuals*	*Cumulative Plan*	*Cumulative Actuals*
COMPLETE Cold and Dark/Demo Ready activities for 234-5Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 236-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 242-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 291-Z	-	-	1	1
Complete Cold and Dark/Demo Ready activities for the Plutonium Finishing Plant (PFP) Ancillary Facilities	-	-	15	14
Complete Demolition of 234-5Z	-	-	1	-
Complete Demolition of 236-Z	-	-	1	-
COMPLETE Demolition of 242-Z	-	-	1	1
COMPLETE Demolition of 291-Z	-	-	1	1
Complete Demolition of PFP Ancillary Facilities	-	-	15	14
Turnover Facility to Long Term Surveillance & Maintenance	-	-	-	-

KEY ACCOMPLISHMENTS

RL-0011_C2 Accomplishments:

- Completed and received approval from the independent Hazard Review Board (HRB) of the higher-risk 236-Z demolition package.
- Shipped eight containers of demolition debris to ERDF and loaded an additional 10 containers for shipment.
- Continued preparations for a CHPRC MA of the readiness to restart the higher-risk demolition in June 2019.

MAJOR ISSUES

Issue:
The PFP project has realized a loss of approximately 30 D&D workers due to opportunities provided by the Labor Asset Management Program offering Nuclear Chemical Operator (NCO) positions across the Hanford site. Ten of the D&D workers transferred to Washington River Protection Solutions, LLC (WRPS) in December, 10 in January, and eight in March. The loss of trained and qualified workers caused a schedule loss of 10 weeks to the PFP project.

Corrective Action:
Work with Labor Relations and Human Resources to fill needed positions.

Status:
In response to the loss of staff and possible additional attrition, PFP has hired 41 D&D workers who will complete classroom training at Volpentest HAMMER Federal Training Center in north Richland with field mentoring training activities to follow. The first group of 31 D&D workers began training on December 3, 2018, and completed field mentoring training activities January 24, 2019. The second group of 10 D&D workers began training on January 28, 2019, and will finish field mentoring training activities March 28, 2019. To prepare new hire D&D workers for safe work activities at PFP, experienced workers and managers have been dedicated to bring new staff up to speed to resume demolition and debris loadout. Furthermore, an additional eight postings are expected to occur in the future. With the completion of training for the second set of new workers, this issue will be closed.

Issue:
The project lacks adequate Radiological Control Technicians (RCTs) to complete work package development, mockups, and field work activities. Efforts to employ adequate RCTs, via contract or otherwise, have been exhausted. The project has not realized planned staffing support for ongoing activities at PFP.

Corrective Action:
CHPRC has teamed with WRPS to hire and train RCTs to fulfill sitewide resource needs.

Status:
The teaming companies have performed initial screening/aptitude testing of applicants. Development of the RCT training course has been completed and the selected candidates began training on March 11, 2019. Allocation of RCT resources is subject to the availability and needs of the Company at the time of training completion, later this summer. Based on the start of training, this issue will be considered closed.

Issue:
Harsh weather has impacted PFP's ability to complete scheduled debris disposition activities. Additionally, in February, there were a significant number of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities, where non-essential personnel were directed not to report to work.

Corrective Action:
The project has set up an acount to collect weather impacts and will pursue a baseline change request (BCR) to drawdown RL contingency to address the realization of this risk.

Status:
Work crews normally supporting decontamination and demolition activities have been reassigned to snow removal and weather mitigation activities. Demolition activities will resume after conditions improve. Better weather in March allowed resumption of debris disposition, and a BCR to be processed in April will close this issue.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011/WBS-011.OA				
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
PFP-P2-002: Weather Impacts During 235-Z Debris Disposition	Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will result in in-scope unplanned work and schedule impacts to the project. **Risk Handling Strategy:** Control **Probability:** Very Likely (>90%) **Worst Case Impacts:** $0, 8 days			**Risk Event:** In February, there were a significant number of work delays, early releases, and cancellations due to adverse weather conditions on the Hanford Site and surrounding communities, where non-essential personnel were directed not to report to work **Risk recovery action(s)** / **FC Date** / **%** Plan for 80% total operation efficiency / Ongoing / N/A **Risk Action Assessment:** Work crews normally supporting demolition and demolition support activities have been reassigned to snow removal and weather mitigation activities. Demolition preparation activities resumed in March after conditions improved. A BCR will be implemented in April to account for the impacts of weather delays on the project schedule.
PFP-P-014: Bump and Roll, Labor Assets Management Program (LAMP), or Other Contractor Hiring of Bargaining Unit Employees Affecting Productivity	Plutonium Finishing Plant (PFP) Hanford Atomic Metal Trades Council (HAMTC) labor resources are unavailable or unqualified due to the bump and roll, LAMP, or other job postings, resulting in schedule impacts to the project. **Risk Handling Strategy:** Control **Probability:** Likely (75% to 90%) **Worst Case Impacts:** $0, 128 days			**Risk Event:** Thirty D&D workers have been hired by other projects on the Hanford Site and have left PFP. The process to hire and train new D&D workers has been initiated. **Risk recovery action(s)** / **FC Date** / **%** Communication and coordination with other projects, contractors, and unions to reduce or eliminate the impact of the bump and roll process. / Ongoing / N/A Hire and train additional D&D workers as needed to perform demolition work at PFP. (Group 1) / 1/24/19 / 100% Hire and train additional D&D workers as needed to perform demolition work at PFP. (Group 2) / 3/28/19 / 95% **Risk Action Assessment:** The first group of 31 new D&D workers completed training/field mentoring activities January 24, 2019. The second group of 10 new D&D workers started training January 28, 2019, and will complete field mentoring activities March 28, 2019. An additional week is needed to complete training/mentoring due to weather delays in February and March. A BCR will be implemented in April to account for the impacts of D&D worker loss delays on the Project schedule.
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No critical risks in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high risk threat value risks in March.				

<table>
<tr><th colspan="5">FY2019 Risk Triggers (Risk could be realized in FY2019)</th></tr>
<tr><td>PFP-P-004: Stop Work From Concerned Workers</td><td>Concerned workers result in a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project.

Risk Handling Strategy: Accept

Probability: Very Likely (>90%)
Worst Case Impacts: $0, 52 days</td><td>  </td><td>  </td><td>Risk Event: During resumption of PFP demolition activities, an increase in stop works could result in delays.
<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Update communications as positions change.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Provide new maps, with entry/exit instructions when boundaries are revised.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Encourage additional worker involvement.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Increase frequency of post-job reviews.</td><td>Ongoing</td><td>N/A</td></tr></table>Mitigation Assessment: No major changes in March. Though increased communication and worker involvement to avoid confusion and concern in an effort to minimize stop works has continued, stop works may impact the project schedule going forward. A BCR will be implemented in April to account for the impacts of stop work delays from July 2018 to November 2018.</td></tr>
<tr><td>PFP-P-007: Demolition Equipment Reliability and Modification</td><td>Ineffective demolition equipment attachments, mechanical failures, or contamination of clean equipment impact the demolition of PFP. Equipment modification, leasing, or replacement will be required, resulting in cost and schedule impacts.

Risk Handling Strategy: Control

Probability: Low (10% to 25%)
Worst Case Impacts: $1 million, 48 days</td><td>  </td><td>  </td><td>Risk Trigger:Equipment failures result in delays to fieldwork.
<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Repurpose other owned equipment on-site.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Develop and maintain min/max inventory of spares.</td><td>Complete</td><td>100%</td></tr><tr><td>Perform planned preventative maintenance on equipment.</td><td>Ongoing</td><td>N/A</td></tr></table>Mitigation Assessment: No major changes in March. All mitigations have been sufficient to maintain equipment in working condition.</td></tr>
<tr><td>PFP-P5-006: Additional Soil Removal is Required</td><td>Prior to the placement of the cover cap, the additional soil added for contamination control is required to be dispositioned, resulting in cost and schedule delays to the project.

Risk Handling Strategy: Control

Probability: Low (10% to 25%)
Worst Case Impacts: $0, 54 days</td><td>  </td><td>  </td><td>Risk Trigger: Additional soil, above planned value, is required to be removed due to contamination or regulatory concerns.
<table><tr><th>Mitigation action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Engage early with RL to identify a path forward associated with the additional soil.</td><td>11/9/18</td><td>100%</td></tr><tr><td>Collect and provide radiological mapping data to RL.</td><td>TBD</td><td>TBD</td></tr></table>Mitigation Assessment: No major changes in March. This has been continued communication with RL on required soil removal. No additional soil above planned quantity is required at this time. RL has requested radiological data to help them determine no additional soil disposition than planned is required.</td></tr>
<tr><th colspan="5">Unassigned Risks (Pending ownership of identified risks/opportunities)</th></tr>
<tr><td colspan="5">No unassigned risks identified in March.</td></tr>
</table>

CRITICAL PATH SCHEDULE

The PFP Critical Path Schedule begins with the resumption of debris disposition of the 234-5Z rubble piles starting with the frontside waste. Once the waste debris is loaded out, demolition will resume on the remaining sections of Zones 2 and 7, with the exception of the drain line. Remote Mechanical C process line demolition, Remote Mechanical A process line demolition, loadout of glovebox HA-46, in parallel with completion of the basement of 234-5Z demolition will begin after a second MA, and concurrence is obtained to resume high-risk demo from RL. The 234-5Z demolition is projected to complete August 26, 2019. The 236-Z Canyon demolition will then resume with completion scheduled for October 24, 2019, meeting the requirements for the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) *Milestone M-083-00A – PFP Facility Transition and Selection Disposition Activities*. Completion of demolition is followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities completing in early February 2020.

SCHEDULE MARGIN/MANAGEMENT RESERVE

Reference Appendix C.2 Formats 1, 2, 3, and, 5 for specific schedule margin/MR utilization for this CAP.

CRITICAL DECISION MILESTONE STATUS

Number	Title	* Due Date	**Forecast Date	Status/ Comment
RL-011.C2	Completion of Demolition of all PFP Facilities.	8/31/2018	1/14/2020	The PFP project realized a loss of two weeks due to unanticipated weather in early March. Completion of demolition of all PFP facilities has slipped to January 14, 2020. Loadout of the existing debris is at 85 percent of the total debris pile shipped to ERDF for disposal.

*Due date reflects CD-4 due date with DOE contingency.
**Forecast date reflects CD-4 due date without DOE contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

DOE ACTIONS / DECISIONS

Working with RL on CD-4 closure actions.

Appendix C.2
RL-0011.C2 - Demolition of PFP Facilities
Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis

CH2MHILL
Plateau Remediation Company

J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

March 2019
CHPRC-2019-03, Rev. 0
Contract DE-AC07-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 1 - WORK BREAKDOWN STRUCTURE

DOLLARS IN: Thousands of $

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT	3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract	a. NAME RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM (YYYYMMDD) 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO (YYYYMMDD) 2019 / 03 / 24
	c. TYPE CPAF / d. SHARE RATIO	c. EVMS ACCEPTANCE NO: X / YES (YYYYMMDD): 2009 / 09 / 18	

5. CONTRACT DATA

a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS (YYYYMMDD)
1	61,784	49,134	5,000	66,784	172,591	66,784	172,591	

6. ESTIMATED COST AT COMPLETION

7. AUTHORIZED CONTRACTOR REPRESENTATIVE

a. NAME (Last, First, Middle Initial): Underwood, Teresa
b. TITLE: Prime Contract Compliance Manager
c. SIGNATURE:
d. DATE SIGNED (YYYYMMDD):

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	154,056		
b. WORST CASE	174,165		
c. MOST LIKELY	167,591	61,784	-105,807

8. PERFORMANCE DATA

CAPN.PBS / Control Account.PARS 2 WBS (2) / ITEM (1)	CURRENT PERIOD: BUDGETED COST WORK SCHEDULED (2)	BUDGETED COST WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	VARIANCE SCHEDULE (5)	VARIANCE COST (6)	CUMULATIVE TO DATE: BUDGETED COST WORK SCHEDULED (7)	BUDGETED COST WORK PERFORMED (8)	ACTUAL COST WORK PERFORMED (9)	VARIANCE SCHEDULE (10)	VARIANCE COST (11)	REPROGRAMMING ADJUSTMENTS: COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	AT COMPLETION: BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
RL-0011 Nuclear Mat Stab & Disp PFP																
RL_0011_C2.05 Disposition PFP Facility	4,646	0	3,377	-4,646	-3,377	88,370	65,070	117,167	-23,299	-52,096	0	0	0	104,441	154,056	-49,615
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL	4,646	0	3,377	-4,646	-3,377	88,370	65,070	117,167	-23,299	-52,096	0	0	0	104,441	154,056	-49,615
f. MANAGEMENT RESERVE														13,535		
g. TOTAL	4,646	0	3,377	-4,646	-3,377	88,370	65,070	117,167	-23,299	-52,096	0	0	0	117,977		

9. RECONCILIATION TO CONTRACT BUDGET BASELINE

a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									-23,299	-52,096				117,977	154,056	-36,079

CONTRACT PERFORMANCE REPORT
FORMAT 2 - ORGANIZATIONAL CATEGORIES

DOLLARS IN Thousands of $

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2019 / 03 / 24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO [ ] YES [X] *(YYYYMMDD)* 2009 / 09 / 18	

5. PERFORMANCE DATA

WBS.Resp Org Group	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE							
ITEM	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
3B - PFP Closure Project	4,646	0	3,377	-4,646	-3,377	88,370	65,070	117,167	-23,299	-52,096	0	0	0	104,441	154,056	-49,615
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL *(Performance Measurement Baseline)*	4,646	0	3,377	-4,646	-3,377	88,370	65,070	117,167	-23,299	-52,096	0	0	0	104,441	154,056	-49,615
f. MANAGEMENT RESERVE														13,535		
g. TOTAL	4,646	0	3,377	-4,646	-3,377	88,370	65,070	117,167	-23,299	-52,096	0	0	0	117,977		

CLASSIFICATION (When Filled In)

March 2019

CONTRACT PERFORMANCE REPORT
FORMAT 3 - BASELINE
DOLLARS IN THOUSANDS
Form Approved
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT	3. PROGRAM	RL_0011_C2 PFP Demolition Capital Asset Project	4. REPORT PERIOD	
CH2M HILL Plateau Remediation Company	a. NAME: Plateau Remediation Contract	a. NAME:	Plateau Remediation Contract	a. FROM:	2019/02/25
b. LOCATION:	b. NUMBER: RL14788	b. PHASE		b. TO:	2019/03/24
Richland, WA	c. TYPE: CPAF	c. EVMS ACCEPTANCE			
	d. SHARE RATIO:	NO	YES X 9/18/2009		

5. CONTRACT DATA

a. ORIGINAL NEGOTIATED COST	b. NEGOTIATED CONTRACT CHANGE	c. CURRENT NEGOTIATED COST (A + B)	d. ESTIMATED COST AUTH UNPRICED WORK	e. CONTRACT BUDGET BASE (C + D)	f. TOTAL ALLOCATED BUDGET	g. DIFFERENCE (E - F)
51,683	$10,101	$61,784	$49,134	$110,919	$117,977	($7,058)

h. CONTRACT START DATE	i. DEFINITIZATION DATE	j. PLANNED COMPL DATE	k. CONT COMPLETION DATE	l. EST COMPLETION DATE
6/19/2008	6/19/2008	9/30/2019	9/30/2019	9/30/2019

6. PERFORMANCE DATA — BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	SIX MONTH FORECAST +1 Apr-19	+2 May-19	+3 Jun-19	+4 Jul-19	+5 Aug-19	+6 Sep-19	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	UNDISTRIB BUDGET	TOTAL BUDGET
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
a. PM BASELINE																	
(BEGIN OF PERIOD)	**83,724**	**4,646**	**4,811**	**5,439**	**4,187**	**1,601**	**34**	**0**	**0**	**0**	**6,090**	**29,182**	**19,407**	**628**	**49,134**	**0**	**104,441**
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																	
None at this time															**0**		**0**
c. PM BASELINE (END OF PERIOD)	**88,370**	**4,646**	**4,811**	**5,439**	**4,187**	**1,601**	**34**	**0**	**0**	**0**	**6,090**	**29,182**	**19,407**	**628**	**49,134**	**0**	**104,441**
7. MANAGEMENT RESERVE																	**13,535**
8. TOTAL																	**117,977**

CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING

Dollars in: FTE

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM *(YYYYMMDD)* 2019 / 02 / 25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)*
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	X YES *(YYYYMMDD)* 2009 / 09 / 18 2019 / 03 / 24

5. PERFORMANCE DATA

WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD *(Cumulative)* (3)	FORECAST *(Non-Cumulative)* SIX MONTH FORECAST BY MONTH *(Enter names of months)* +1 APR 2019 (4)	+2 MAY 2019 (5)	+3 JUN 2019 (6)	+4 JUL 2019 (7)	+5 AUG 2019 (8)	+6 SEPT 2019 (9)	ENTER SPECIFIED PERIODS OCT 2019 (10)	NOV 2019 (11)	DEC 2019 (12)	FY20-LC (13)	ATCOMPLETE (14)	AT COMPLETION (15)
3B - PFP Closure Project	140	3097	154	153	151	154	151	157	141	98	88	2	0	4345
g. TOTAL DIRECT	140	3097	154	153	151	154	151	157	141	98	88	2	0	4345

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 5 - Explanations and Problem Analysis

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM (YYYYMMDD) 2019/02/25
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO (YYYYMMDD) 2019/03/24
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE No X Yes (YYYYMMDD) 2009 / 09 / 18	

Direct Projects

5. Evaluation	Budget	Earned	Actuals	SV in $	SV in %	CV in $	CV in %	SPI	CPI
Current:	4,645.7	0.0	3,377.2	-4,645.7	-100.0%	-3,377.2	0	0.00	0.00
Cumulative:	88,369.7	65,070.3	117,166.6	-23,299.4	-26.4%	-52,096.3	-80.1%	0.74	0.56
	BAC	**EAC**	**VAC in $**	**VAC in %**	**TCPI to BAC**	**TCPI to EAC**			
At Complete:	104,441.3	154,056.0	-49,614.6	-47.5%	0	1.07			

Explanation of Variance/Description of Problem:
Current Month:
Schedule Variance: The current month favorable cost variance is primarily due to a slip in schedule for March 2019 due to harsh winter weather. Work crews normally supporting demolition activities were reassigned to snow removal and weather mitigation activities.

Cost Variance: The current month favorable cost variance is primarily due to a slip in schedule for March 2019 due to harsh winter weather. Work crews normally supporting demolition activities were reassigned to snow removal and weather mitigation activities.

Cumulative to Date:
Schedule Variance: The cumulative unfavorable schedule variance is due to a loss of 20 D&D workers due to hiring by Washington River Protection Solutions, LLC (WRPS). Half of the D&D workers transferred to WRPS in December and the other half in January. In response to this loss of staff, PFP has hired an additional 31 D&D workers who began training on December 3, 2018. Classroom training at Volpentest HAMMER Federal Training Center completed January 11, 2019. Field mentoring training activities were completed January 24, 2019. To prepare new hire D&D workers for safe work activities at PFP, experienced workers and managers have been dedicated to bring new staff up to speed to resume demolition and debris lead-out. This impact resulted in 10 weeks of schedule slip. An abnormally harsh winter has been experienced in January and February. R time was granted for an average of 30 hours. When workers did report, snow removal was a focus, and further cold conditions would not allow field work. The combination of these impacts resulted in 4 weeks of schedule slip. PFP also has realized 11 stop works from June 25, 2018 to November 30, 2018, that resulted in an impact to 34 work days.

Cost Variance: The cumulative negative cost variance is associated with MSA resources arriving to support PFP demolition that were planned as P/Q shift support. Additionally, Readiness Assessment activities lagged due to a delay in the start of 236-Z Demolition and increased requirements to show readiness resulting in increased costs due to additional time and effort required from subcontracted and direct labor resources. The apportioned project management activities (i.e. project oversight and planning) and support activities are ongoing, while a delay in the discrete field work is resulting in minimal apportioned BCWP. Demolition mobilization activities took longer than originally assumed because of recommendations made during the readiness assessment and purchasing unplanned PBS fixative to support 236-Z demolition. In addition, significant winter weather impacts (i.e., snow, wind, freezing rain, etc.) have been recognized on the Hanford Site. Site closures, freezing temperatures and significant snowfall that required clearing of the demolition zone rather than performing physical demolition on the facilities while a constant staff provides demolition support services is a contributing factor. Unplanned Management Assessment efforts for the 234-5Z and 291-Z facilities took longer than originally assumed. Impacts associated with the Stop Work that was initiated by the HAMTC union leadership on November 11, 2017 "associated with concerns over events both inside and outside of the facility." The main issue involved employee proximity to radiological boundary areas during demolition. Radiological boundaries were reconfigured and impacted employees were relocated. As the project gets further into the demolition phase of the PRF Canyon, increased utilization of Personnel Protective Equipment to align with the original plan as well as increased material procurements to align with the scope being performed (i.e., P-100 filters, Labounty Shear, additional fixative, etc.) are also contributing to this variance. An adjustment to the General & Administrative (G&A) Rate for FY2017 resulted in a reduction to the Performance Measurement Baseline (PMB) of $463K. Finally, impacts from a contamination event that occurred on Friday, December 15, 2017 swing shift where RadCon personnel performing routine surveys following the day shift demolition activities discovered low level contamination on a cookie sheet. This led to a wider search, and a "speck" of contamination was smeared from a government vehicle. A CHPRC management stop work on demolition activities was declared and a critique held to discuss the contamination spread, possible causes, and path forward. A root cause analysis was conducted and resumption actions identified. Also, the project expereienced a loss of 20 D&D workers due to hiring by Washington River Protection Solutions, LLC (WRPS). Half of the D&D workers transferred to WRPS in December and the other half in January. In response to this loss of staff, PFP has hired an additional 31 D&D workers who began training on December 3, 2018. Classroom training at Volpentest HAMMER Federal Training Center completed January 11, 2019. To prepare new hire D&D workers for safe work activities at PFP, experienced workers and managers have been dedicated to bring new staff up to speed to resume demolition and debris lead-out. PFP also has realized 11 stop works from June 25, 2018 to November 30, 2018, that resulted in an impact to 34 work days.
This is partially offset by recognized efficiencies associated with the removal of the 18 sections of the PRF gallery gloveboxes, progress on demolition of 236-Z, demolition of the 2727-Z and 2729-Z facilities, the 242-ZA and 242-Z facilities, the 291-Z facility, 291-Z stack, 234-5ZA, 252-Z1, 2503-Z, 2735Z, 2734ZA, ZB, ZC, ZD, and ZL facilities.

Impact:
Schedule Impact: Completion of all demolition activities are forecast to occur in October 2019. The TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities of November 30, 2017 was not met.

Cost Impact: A negative VAC is reflective of impacts associated with recovery efforts from a contamination event that occurred on December 15, 2017.

Corrective Action:
NOTE: All corrective actions and resumption pre-start items identified in the management assessment are have been completed, and the DOE has provided concurrence for the resumption of lower risk work. The Stop Work issued by CHPRC management on demo activities has been lifted and resumption of low risk debris disposition is underway.

Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):
The following items are addressed, as applicable:
1. Schedule Margin Analysis: No change in the month of March
2. IMS Data dictionary Changes: No change in the month of March
3. Forecast Schedule with No Baseline: No change in the month of March
4. UB Balance: No change in the month of March
5. Negative ACWP: No change in the month of March
6. EAC Analysis: Best Case = $154,056; Most Likely = $167,591; Worst Case = $174,165. The Best Case 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 Case EAC is the ACWP plus the ETC 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.
7. Negative CV > VAC: No change in the month of March
8. MR Transactions: No change in the month of March
9. Freeze Period Changes: No change in the month of March
10. Retroactive Changes: No change in the month of March
11. EVT Changes: No change in the month of March

Prepared by: Jason Knowlton **Date: 04/22/19** **Approved by:** **Date:**