

Monthly Performance Report

June 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 7:29 am, Jul 29, 2019

Release Approval

Date

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CH2MHILL
Plateau Remediation Company



L. Ty Blackford
President and Chief
Executive Officer

Monthly Performance Report

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June 2019
CHPRC-2019-06, Revision 0

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EXECUTIVE SUMMARY

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

- Plutonium Finishing Plant (PFP) Closure Project:** The PFP Closure Project team completed demolition of 236-Z facility stairwells 1 and 2 and loaded out the associated debris. Seventy-seven containers of low risk demolition debris were shipped to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal. Piping contaminated with radioactive material was removed from Tunnel 3, which allowed a reduction of the PFP Material Balance Area, providing crews more efficient access to the work zone.
- Waste and Fuels Management Project:** 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 completed the final design for the WESF Modifications. Project review comments are being incorporated into the draft statement of work for the capsule storage area construction (CSA) subcontract. Proposals for the construction of the Maintenance and Storage Facility (MASF) Cs/Sr capsule handling mockup facility were reviewed by the source selection board and their recommendations provided to procurement for a planned award in July. At WESF, crews completed replacement of Panel C (heating, ventilation, and air condition electrical panel) and made canyon entries to continue work on maintenance of the 15-ton canyon crane. Painting of the crane load block was completed and decontamination of the drum and other areas of the crane progressed. The Transuranic (TRU) Program continued to move forward on performing the enhancement of acceptable knowledge on TRU waste streams. Five of ten waste streams are complete. The sludge receipt team continued to receive sludge transport and storage containers (STSCs) from the 100K West Reactor Basin for interim storage at T Plant. STSC 15 was received on June 10, 2019.
- Soil and Groundwater Remediation Project:** In the 100 Areas, crews continued operations of the soil infiltration gallery at the K West Pump and Treat (P&T) and injected over nine million gallons of water, forcing residual hexavalent chromium into groundwater where it is being extracted and treated by the K West P&T facility. In the 200 West area, crews completed cleaning of injection wells 299-W10-35 and 299-W7-14, commenced installation of the hypochlorite injection system, continued chlorination of injection transfer building (ITB) 1 and ITB 2 injection well lines, completed rehabilitation of seven injection wells, and completed transfer of 430,000 gallons of purge water from Modular Storage Unit 3 to the 200W P&T for treatment and disposition. Drilling crews completed three monitoring wells. Remedy Selection and Implementation project teams transmitted the 100-BC-5 Remedial Investigation/Feasibility Study report Revision 0 to RL, and certified the Engineering Evaluation Reports for the Nonradioactive Dangerous Waste Landfill (NRDWL), A Farm and C Farm.
- K Basins Operations:** STSC 15 was filled with sludge from the 105KW fuel storage basin and shipped to T Plant on June 10, 2019. Soil Remediation and Waste Site Closure started removing and stockpiling overburden from Waste Site 100-K-47:2. The K West Basin Deactivation group completed basin wall surveys at the waterline supporting characterization of the wall source term and completed Attila 3-G model training for radiological engineers and designers, increasing the contingent of local resources capable of supporting the K West Basin characterization effort. For the Decontamination & Decommissioning (D&D) group, Buildings 1724K, 1724KA and 167 were demolished and debris loadout continued.



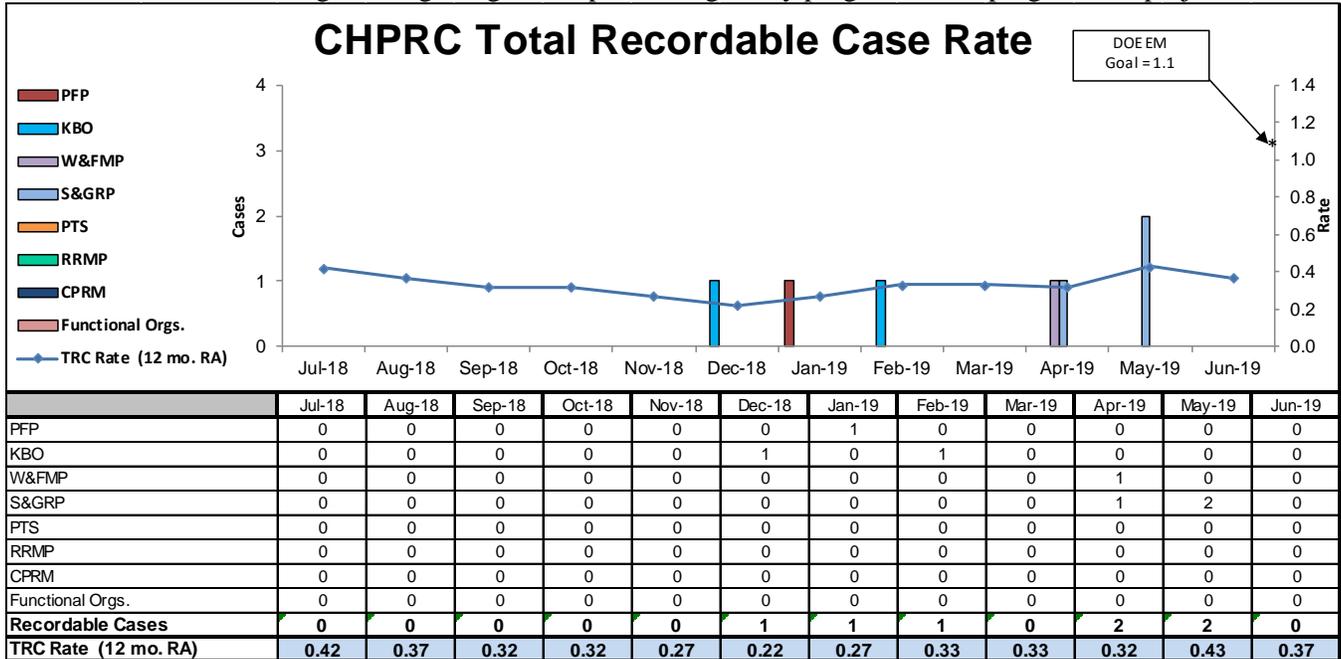
Crews at PFP are continuing progress on lower-risk demolition. The removal of this section of contaminated piping allows us to safely reduce the size of our Material Balance Area, providing crews more efficient access to the work zone.

- **River Risk Management Project:** At the 324 Building, maintenance and repairs completed this period include repair of the 40 ton chiller on the heating, ventilation, and air conditioning system, installation of lighting in the truck lock, completion of reduced ventilation testing, and the completion of maintenance on the C Cell crane. Also at the 324 Building, in the airlock, all cell sealing was completed, the hot cell airlock track system was installed, and the first three bins of B Cell waste were loaded into a 9x5x5 waste box along with a used roughing filter from C Cell, removed via the track system, and staged for shipping to ERDF for disposal. Larger 44 inch waste bins were loaded into B Cell, and the remote excavator arm (REA) continued to be used for waste loading. Conditioning of the B Cell gallery wall was completed in support of the installation of the final REA through support. Geoprobe removal from under B Cell was completed to allow micropile installation, grout injection, and soil excavation inside B Cell. Drilling on the first of four pilot holes was completed in the basement of the 324 Building, supporting validation of the ability to install structurally supporting micropiles.
- **Central Plateau Risk Management (CPRM) Project:** CPRM personnel completed mercury vapor sampling and monitoring throughout the Reduction-Oxidation (REDOX) facility with exception of the main canyon and seventh floor sample gallery. Additionally, workers in REDOX removed all combustible waste items from the operating gallery. Asbestos insulation abatement and piping removal of the 200 West steam lines continued with crews eclipsing over 8,000 linear feet of piping removed this fiscal year. With the exception of a “hot pipe,” personnel completed all hazardous material removal and asbestos abatement from the 242-B/BL facility, as well as de-watering and grout filling the 242-BL basin in preparation of demolishing the facility in July. Finally, crews were finalizing demobilization from the Plutonium Uranium Extraction Plant (PUREX) Tunnel 2 grouting worksite.

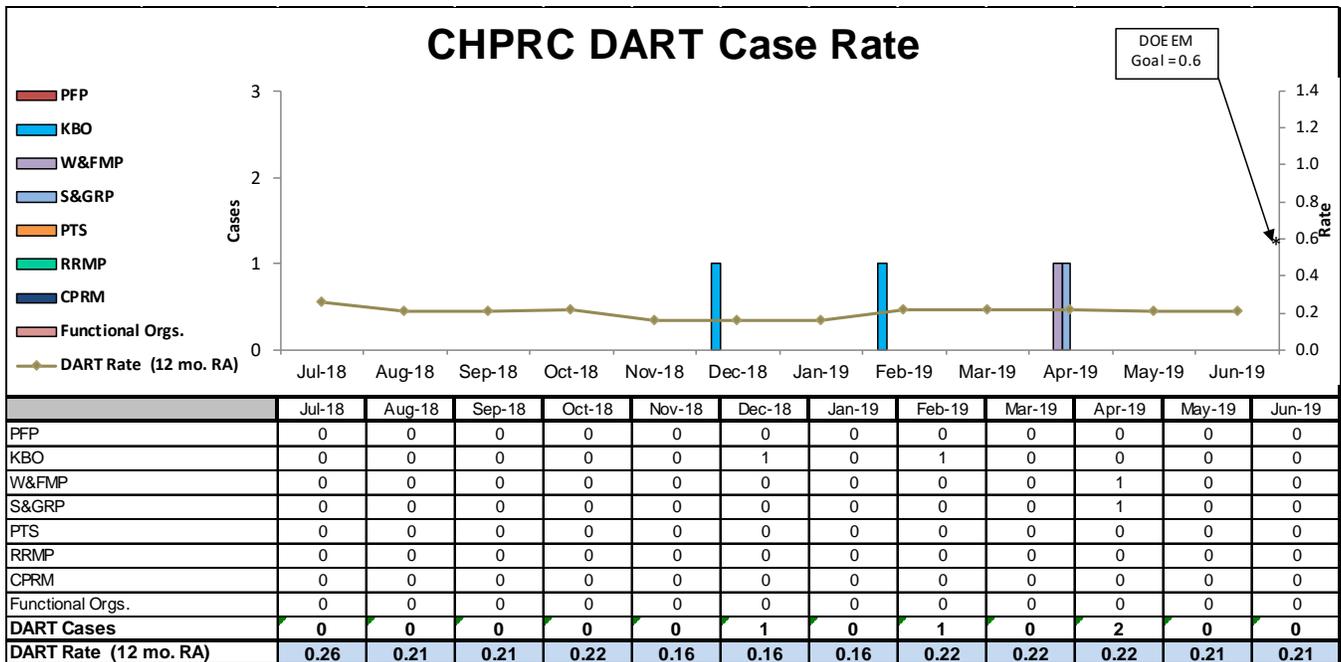
- The President’s Zero Accident Council (PZAC) meeting for June was hosted by Environmental Program and Strategic Planning. The three main ideas were:
 - o Impairment, Fatigue, and Recharging.
 - o Hazard Recognition.
 - o Slips, Trips, and Falls.
- Four “*Thinking Target Zero*” (TTZ) bulletins were published to convey important occupational, safety, health, and environmental messages:
 - o EMS External Audits.
 - o Poor Air Quality.
 - o Outdoor Activities.
 - o VPP 2019 SIP Goals.
- *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
 - o Four Lessons Learned:
 - OPEXShare: 2019-RL-HNF-63614 Hanford Fire Department prepares for fire season and heavier vegetation growth.
 - OPEXShare: 2019-BNL-I-1387 Well Drilling Unit Breaches Underground Tunnel – Brookhaven National Laboratory (BNL).
 - OPEX Safety Bulletin: Heat safety Tips and Resources, June 11, 2019.
 - OPEX Summary 2019-02 Operating Experience Share: OES 2019-02 The Importance of Reporting Near Misses.
 - o Injuries.
 - o Weekly Ethics Moments.
 - o Vehicle events.
 - o National Safety Month.
 - o CPR/AED Awareness Week.
 - o Eye Protection.
 - o Reporting injuries.
 - o Rattlesnake safety reminder.
 - o Poor Air Quality Hazards.
 - o Headphone use while driving.
 - o Summer Safety 2019.
 - o Preventing Slips, Trips & Falls.
 - o Stretch and Flex.
 - o PZAC Takeaways,
 - o HAMMER dress code.

TARGET ZERO PERFORMANCE

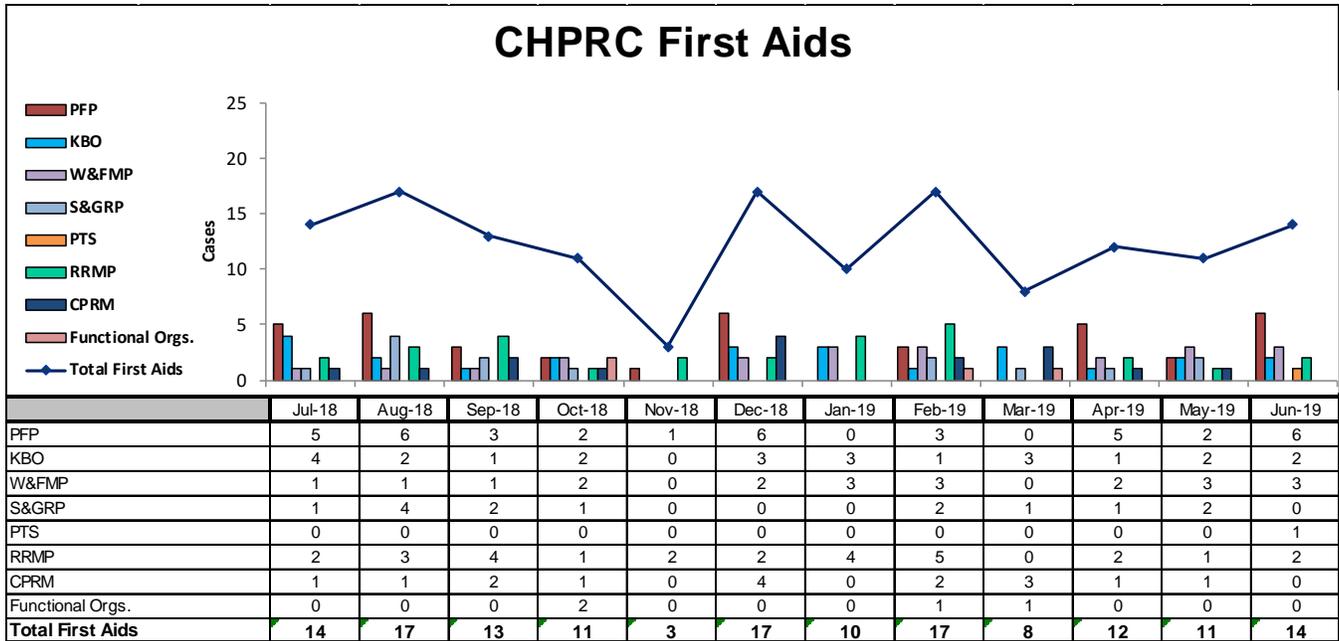
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.37 is based on a total of seven Recordable injuries. June had no reported Recordable cases.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.21 is based upon a total of four Days Away cases. June had no reported DART cases.



First Aid Case Summary: CHPRC reported fourteen first aid cases in June. The contributors were seven abrasions/bruises/contusions, three sprains/strains/pains, three miscellaneous (burns, rashes, repetitive motion, etc.) and one insect bite. There were eight self-treat cases reported in June.

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

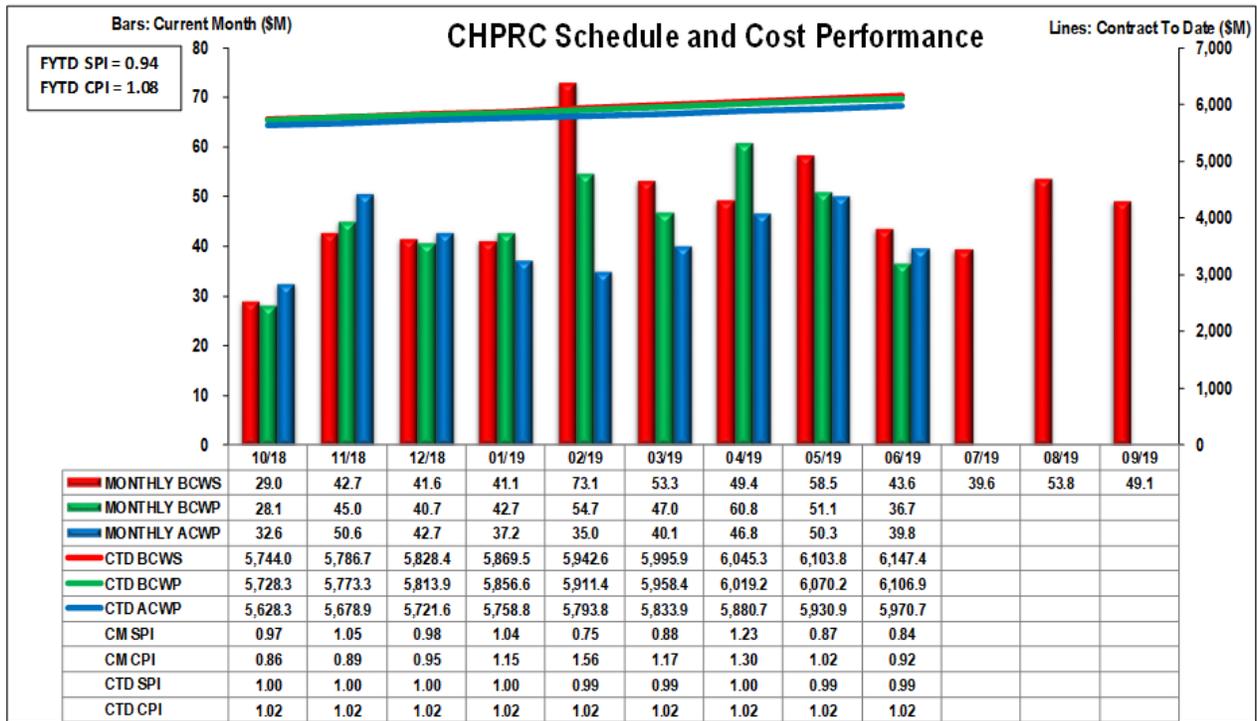
Projects

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

Project Services and Support

- No Major Issues to report for June.

EARNED VALUE MANAGEMENT



	\$M					\$M					\$M		
	Current Period			Variance		Contract to Date			Variance		Contract Period		
	Budgeted Cost	Actual Cost	ACWP	Schedule	Cost	Budgeted Cost	Actual Cost	ACWP	Schedule	Cost	BAC	EAC	Variance
RL-0011 - Nuclear Materials Stab & Disp PFF	6.0	2.1	4.9	(3.9)	(2.8)	1101.0	1087.8	1186.1	(13.2)	(98.3)	1,122.9	1,228.8	(105.9)
RL-0012 - SNF Stabilization & Disposition	1.4	1.6	1.5	0.3	0.1	756.2	755.6	725.8	(0.6)	29.7	761.1	730.2	30.9
RL-0013 - Solid Waste Stab & Disposition	12.9	11.9	10.6	(0.9)	1.4	1443.1	1439.7	1348.9	(3.4)	90.8	1,485.6	1,392.4	93.2
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	10.5	9.1	8.8	(1.4)	0.3	1612.6	1608.9	1551.9	(3.7)	56.9	1,646.7	1,585.6	61.1
RL-0040 - Nuc Fac D&D - Remainder	3.5	2.9	4.6	(0.6)	(1.7)	544.6	538.2	519.5	(6.5)	18.7	555.8	540.5	15.3
RL-0041 - Nuc Fac D&D - RC Closure Project	9.1	8.9	9.3	(0.2)	(0.4)	662.2	649.1	615.2	(13.2)	33.9	696.9	660.0	37.0
RL-0042 - Nuc Fac D&D - FFTF Project	0.1	0.1	0.1	0.0	0.0	27.7	27.7	23.3	0.0	4.4	28.1	24.1	4.0
Total	43.6	36.7	39.8	(6.9)	(3.1)	6,147.4	6,106.9	5,970.7	(40.5)	136.2	6,297.1	6,161.5	135.6

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

Performance Summary

CHPRC continues to track completion of the contract within budget and is currently projecting a variance at completion of \$135.6 million, with \$63.3 million of management reserve (MR), for a total positive variance of \$198.9 million. For June, the project was 15.9 percent behind schedule and 8.6 percent over planned cost. Contract to date, the project was 0.7 percent behind schedule and 2.2 percent under planned cost.

The current month negative schedule variance (SV) is primarily due to project breakdown structure (PBS) RL-0011 schedule slip of 10 working days due to wind impacts and a deliberate rate of demolition. The PFP team completed stairwells 1 and 2 but did not complete Zones 3, 4.1, and 7, as well as tunnels 1, 2, 3, and 6. The variance is also an artifact of the baseline change request (BCR) in April to incorporate the impact of stop works, demolition and decontamination (D&D) Labor Asset Management Program (LAMP) movement, and unexpected winter weather, which added a hotel load for 3.5 months in which all performance was taken up front.

Also contributing to the negative SV is PBS RL-0013 due to early subcontractor completion of the revised cask storage system final design package which was planned in the current period.

Finally, the negative SV for PBS RL-0030:

- Composite analysis vadose zone model runs were delayed as a result of in-scope unplanned work encountered in a prior period along with a slow down as the new computing system was installed. The slowdown was further delayed by limited resources, which were allocated to higher priority work.
- The selected subcontractor for the M-24-00 five-well campaign submitted an amended drilling schedule with a later start date than planned, resulting in the delay of subcontractor mobilization and drilling initiation.
- Performance on ground water sample collection was over-stated in a prior period. A reconciliation performed in June identified incorrect performance for some activities.
- The planned procurement of a pump-setting rig has been delayed because of bids requiring a 12-month lead-time for delivery. The rig is now expected to be received in fiscal year (FY) 2020.

The current month negative cost variance (CV) is primarily due to PBS RL-0011 attributed to labor and subcontract costs for lagging performance on demolition activities. Demolition of the remaining PFP structures has been slower than planned due to wind impacts and a deliberate rate of demolition and debris loadout. The deliberate rate of demolition is appropriate to allow for proper sequencing and critical consideration of activities so they may be performed safely.

Also contributing to the negative CV is PBS RL-0040 attributed to incurring change orders for directing the grout contractor to perform additional demobilization activities for PUREX Tunnel 2, including removal of the power drop at the Integrated Disposal Facility, repair of the perimeter fence, and removal and disposal of the conveyances. The variance is also attributed to performing 242-B/BL D&D work scope that is not currently in the proposed baseline. This project is well ahead of schedule and this authorized scope is expected to be definitized within the quarter. Finally, the discovery of mercury on the seventh floor of the REDOX silo gallery continues to halt progress as costs for updating air sampling, worker safety documentation, and industrial hygiene controls continue.

The negative CV is partially offset by PBS RL-0013 adjustment for work performed in prior periods in the IDF Facility Modifications account. This was authorized via implementation of BCR-013-008R0 "Changes to FY2019 IDF Design Estimate."

FUNDING ANALYSIS

Fiscal Year (FY) 2019 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2019		Variance
		Projected Funding	Spending Forecast	
Estimate at Complete				
RL-0011	Nuclear Materials Stabilization and Disposition	70.0	65.4	4.6
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	20.1	17.0	3.2
RL-0012	15-D-401 Sludge Retrieval Project	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	173.5	147.8	25.8
RL-0013	Management of Cesium and Strontium Capsules	6.6	3.6	3.1
RL-0030	Soil, Groundwater and Vadose Zone Remediation	132.9	114.3	18.6
RL-0040	Nuclear Facility D&D, Remainder of Hanford	81.8	75.4	6.4
RL-0041	Nuclear Facility D&D, River Corridor	148.3	129.5	18.9
RL-0042	Fast Flux Test Facility Closure	4.3	2.3	2.0
Total Estimate at Complete		637.6	555.2	82.5
Scope Pending Change Management				
RL-0013	Waste and Fuels Management Project	0.0	2.5	(2.5)
RL-0030	Soil, Groundwater and Vadose Zone Remediation	0.0	0.2	(0.2)
RL-0040	Nuclear Facility D&D, Remainder of Hanford	0.0	1.9	(1.9)
RL-0041	Nuclear Facility D&D, River Corridor	0.0	0.5	(0.5)
Total Incremental Work Scope		0.0	5.1	(5.1)
Total Fiscal Year Spend Forecast				
RL-0011	Nuclear Materials Stabilization and Disposition	70.0	65.4	4.6
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	20.1	17.0	3.2
RL-0012	15-D-401 Sludge Retrieval Project	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	173.5	150.3	23.3
RL-0013	Management of Cesium and Strontium Capsules	6.6	3.6	3.1
RL-0030	Soil, Groundwater and Vadose Zone Remediation	132.9	114.5	18.4
RL-0040	Nuclear Facility D&D, Remainder of Hanford	81.8	77.3	4.5
RL-0041	Nuclear Facility D&D, River Corridor	148.3	130.0	18.3
RL-0042	Fast Flux Test Facility Closure	4.3	2.3	2.0
Total		637.6	560.3	77.3

Funds/Variance Analysis

For June, overall FY2019 projected funding reduced from \$649 million to \$638 million after deobligation of \$11 million remaining after completion of project 15-D-401 Sludge Removal Project. The spending forecast decreased a total of \$11 million, primarily due to alignment of fee to Contract Modification 684, which provided a global settlement through FY2018.

BASELINE CHANGE REQUESTS

In June 2019, CHPRC approved and implemented five Baseline Change Request (BCR) into the performance measurement baseline (PMB) budget. Four of the five BCRs impacted the PMB. Each change request is identified in the tables below:

Change Request #	Title	PBS	Summary of Change
BCR-013-19-008R0	<i>Changes to FY2019 IDF Design Estimate</i>	RL-0013	This BCR incorporated increased design scope associated with the Integrated Disposal Facility (IDF) under WBS 013.12.03.02.01 - IDF Mods in Preparation for Ramp-up. This BCR increased the PMB value by \$980K.
BCR-030-19-008R0	<i>Incorporate Additional FY2019 Work Authorization RL-0030</i>	RL-0030	This BCR incorporated RL-0030 work scope into the performance measurement baseline (PMB) which was authorized by the RL Contracting Officer. This BCR increased the PMB value by \$1,657K.
BCR-040-19-004R0	<i>Initiate Planning for the Stabilization of 216-Z-9, 241-Z-361, and 216-Z-2</i>	RL-0040	This BCR incorporated scope to initiate planning for stabilization of 216-Z-9, 241-Z-361, and 216-Z-2. This scope was authorized by the RL Contracting Officer. This BCR increased the PMB value by \$967K.
BCR-041-19-009R0	<i>100K PCM Replacements and STSC Purchase</i>	RL-0041	This BCR incorporated scope to upgrade three Personal Contamination Monitors (PCM) and purchase two additional Sludge Transportation & Storage Containers (STSCs). This BCR increased the PMB value by \$809K.
BCRA-PRC-19-016R0	<i>HPIC Updates June 2019</i>	000s, RL-0041,	This BCR incorporated June FY2019 Hanford Programs Integrated Control Module (HPIC) updates. This BCR did not change the PMB value.

The allocated (distributed) budget increased by \$4,413K in June.

Undistributed Budget (UB) Activity

BCR Number	Title	PBS	Fiscal Year	UB
N/A	N/A	N/A	2019	\$0

There was no change to UB in June.

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 June.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2019	\$0

There was no change to fee in June.

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).

June 2019 Summary of Changes (\$M)

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	FY2019	FY2020	Contract Period Total	Total PMB
April 2019 Estimate											
PMB	3,391.48	391.65	471.32	504.83	485.03	470.65	2,323.48	570.46	7.32	6,292.73	6,292.73
MR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.28	0.00	63.28	63.28
Fee	155.50	14.32	14.50	27.80	10.61	18.86	86.10	13.17	0.00	254.77	254.77
Total	3,546.98	405.98	485.82	532.63	495.64	489.51	2,409.58	646.90	7.32	6,610.78	6,610.78
May 2019 Change											
PMB											
Change to PMB	0	0	0	0	0	0	0	0	0	0	0
MR											
Change to MR	0	0	0	0	0	0	0	0	0	0	0
Fee											
Change to Fee	0	0	0	0	0	0	0	0	0	0	0
Total Change	0	0	0	0	0	0	0	0	0	0	0
May 2019 Estimate											
PMB	3,391.48	391.65	471.32	504.83	485.03	470.65	2,323.48	570.46	7.32	6,292.73	6,292.73
MR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.28	0.00	63.28	63.28
Fee	155.50	14.32	14.50	27.80	10.61	18.86	86.10	13.17	0.00	254.77	254.77
Total	3,546.98	405.98	485.82	532.63	495.64	489.51	2,409.58	646.90	7.32	6,610.78	6,610.78

Changes to/Utilization of Management Reserve in June 2019 (\$M)

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	FY2019	Total
May 2019 MR Totals									
RL-0011	0	0	0	0	0	0	0	15.93	15.93
RL-0012	0	0	0	0	0	0	0	8.16	8.16
RL-0013	0	0	0	0	0	0	0	6.18	6.18
RL-0030	0	0	0	0	0	0	0	7.76	7.76
RL-0040	0	0	0	0	0	0	0	8.70	8.70
RL-0041	0	0	0	0	0	0	0	16.35	16.35
RL-0042	0	0	0	0	0	0	0	0.19	0.19
Total	0	0	0	0	0	0	0	63.28	63.28
June 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
June 2019 MR Totals									
RL-0011	0	0	0	0	0	0	0	15.93	15.93
RL-0012	0	0	0	0	0	0	0	8.16	8.16
RL-0013	0	0	0	0	0	0	0	6.18	6.18
RL-0030	0	0	0	0	0	0	0	7.76	7.76
RL-0040	0	0	0	0	0	0	0	8.70	8.70
RL-0041	0	0	0	0	0	0	0	16.35	16.35
RL-0042	0	0	0	0	0	0	0	0.19	0.19
Total	0	0	0	0	0	0	0	63.28	63.28

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 - 6/30/2019					
Reporting Category					
	\$ Value	%	Goal %		
SB	\$1,609.69	55.93%	49.3%	PRC clause H.20b small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
SDB	\$292.40	10.16%	8.2%		
SWOB	\$295.81	10.28%	7.5%	CHPRC Contract Value:	\$6,596.68
HUB	\$91.61	3.18%	2.2%	SB actual:	\$1,609.69
VOSB	\$245.41	8.53%	3.5%	SB Performed %:	24.40%
SDVO	\$154.73	5.38%	1.3%	PRC clause H.20a max self performed requirement ≤ 65% of Contract Price Self Performed	
NAB	\$82.25	2.86%	N/A	CHPRC Contract Value:	\$6,596.68
Large	\$766.94	26.65%	N/A	CHPRC Self Performed:	\$3,949.33
UNK	\$0.01	0.00%	N/A	CHPRC Self Performed %:	59.87%
GOVT	\$5.19	0.18%	N/A		
GOVT CONT	\$483.21	16.79%	N/A		
EDUCATION	\$0.17	0.01%	N/A		
NONPROFIT_	\$4.37	0.15%	N/A		
FOREIGN	\$8.71	0.30%	N/A		
Total	\$2,878.29	100.00%	N/A		

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 Transuranic (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

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In June, the Plutonium Finishing Plant (PFP) team completed demolition and debris disposition of Core Stability Zones (CSZ) 2.3 and 2.5, including both stairwells and elevator shaft. Demolition started with CSZ 3 and by month's end, tunnels 1, 2, 3 and 6 were 75 percent complete. PFP Management met with the Washington State Department of Ecology, U.S. Environmental Protection Agency, and Washington State Department of Health to discuss lifting of the Article 32 on higher-risk work. Article 32's stop work was verbally lifted, with the finalization process underway. A new Material Balance Area was established, and implementation of the new boundary is in progress. Seventy-seven (77) containers of low-risk demolition debris were shipped to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal during the month of June.

Key Metrics

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
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 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	539 m ³	19,566 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	A minimum of four EMS presentations; involve one to two employees in compliance review; facility walk-downs	9/30/19	100%

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	6	40	<p>6/5/2019 – Employee was performing radiological surveys within the high-contamination area (HCA) demolition zone and felt increasing pain in the left elbow, forearm, and hand. Employee left the area, notified supervisor, and was taken to HPMC Corporation (HPMC) for evaluation. Employee reported that the original injury occurred 6/5/2019 while twisting powered air purifying respirator cartridges during the respirator release process but did not report this injury until 6/7/2019. Employee was treated via brace/tape and released back to work without restrictions. (25191)</p> <p>6/10/2019 – Employee was walking around the east end of 234-5Z when they tripped and fell onto the left knee. Employee was taken to HPMC for evaluation and released back to work without restrictions. (25190)</p> <p>6/11/2019 – Employee was walking around the east end of 234-5Z when they tripped and fell over the tines of a telehandler forklift onto the right elbow. Employee was focused on work crew activities in the field and was not paying attention to ground being traversed. Employee was taken to HPMC for evaluation and released back to work without restrictions. (25193)</p> <p>6/17/2019 – Employee was walking from MO-2187 to MO-2189 when the boot lace was caught by the opposite foot causing a face-down fall on the gravel resulting in hands, forearm, left knee, chin, and left upper arm injuries. Employee was taken to HPMC for evaluation and instructed to protect the wounds/open skin lesions from contamination. Employee was assigned work activities outside the PFP demolition area. (25200)</p> <p>6/19/2019 – Employee was removing the gasket and zip tie from a respirator hood when scissors they were using slipped and cut the left hand middle finger. The employee was treated with a bandage. (25202)</p> <p>6/24/2019 – Employee noticed irritated, bumpy, scratchy skin on the hands and wrists beginning 6/10/2019, upon exiting the HCA. Employee notified the supervisor when the condition did not improve but became scaly, itchy, and dry as of 6/24/2019. Employee was taken to HPMC for evaluation and referred to an outside medical provider. (25207)</p>
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments:

- Completed the demolition and debris disposition of CSZ 2.3 and 2.5, including stairwells 1 and 2 and the elevator shaft.
- Shipped 77 containers of demolition debris to ERDF, completing loadout of CSZ 2.3 and 2.5 debris.
- Started demolition on CSZ 3 and tunnels 1, 2, 3, and 6.
- Completed removal of high-efficiency particulate air filters from the ion exchange exhauster units, and successfully aerosol tested unit 2. The ion exchange exhauster units will be used in high-risk demolition activities.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
RL-0011/WBS-011.OA									
Explanation of major changes to the project monthly stoplight chart: Risk PFP-P2-002, "Weather Impacts During 235-5Z Debris Disposition", was added as a FY2019 Risk Trigger.									
Realized Risks (Risks that are currently impacting project cost/schedule)									
No realized risks identified in June.									
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)									
No critical risks identified in June.									
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)									
No high risk threat values identified in June.									
FY2019 Risk Triggers (Risk could be realized in FY2019)									
PFP-P2-002: Weather Impacts During 235-5Z 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: \$6.5M, 20 days		Risk Event: Summer weather brings high temperatures that limit outside fieldwork. Additionally, when sustained wind speeds are greater than 30 mph or gusts are above 40 mph, work will be stopped pending radiological surveys to confirm that no contamination has spread beyond established boundaries. <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action (s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Move workforce to "tropical" shift schedule</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> Risk Action Assessment: Wind has impacted demolition progress. Surveys are conducted more efficiently resulting in less time to recover from wind events, allowing work to resume sooner following an event. The tropical shift allows work crews to make early morning zone entry to avoid heat impact.	Mitigation action (s)	FC Date	%	Move workforce to "tropical" shift schedule	Complete	100
Mitigation action (s)	FC Date	%							
Move workforce to "tropical" shift schedule	Complete	100							

Unmitigated Risk Impacts	Assessment		Comments															
	Month	Trend																
RL-0011/WBS-011.OA																		
<p>PFPP-P-004: Stop Work From Concerned Workers</p> <p>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.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Likely (>90%) Worst Case Impacts: \$0, 52 days</p>	●	↔	<p>Risk Trigger: During resumption of PFP demolition activities, an increase in stop works could result in delays.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Mitigation Assessment: No major changes in June. Increased communication and worker involvement to avoid confusion and concern in an effort to minimize stop works have continued; stop works may impact the project schedule going forward.</p>	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 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																
<p>PFPP-P5-006: Additional Soil Removal is Required</p> <p>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.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$0, 54 days</p>	●	↔	<p>Risk Trigger: Additional soil above planned value is required to be removed due to contamination or regulatory concerns.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Engage early with U.S. Department of Energy, Richland Operations Office (RL) to identify a path forward associated with the additional soil.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Collect and provide radiological mapping data to RL.</td> <td>TBD</td> <td>TBD</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in June. 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 determine that no additional soil disposition is required.</p>	Mitigation action(s)	FC Date	%	Engage early with U.S. Department of Energy, Richland Operations Office (RL) to identify a path forward associated with the additional soil.	Complete	100	Collect and provide radiological mapping data to RL.	TBD	TBD						
Mitigation action(s)	FC Date	%																
Engage early with U.S. Department of Energy, Richland Operations Office (RL) to identify a path forward associated with the additional soil.	Complete	100																
Collect and provide radiological mapping data to RL.	TBD	TBD																
Unassigned Risks (Pending ownership of identified threats/opportunities)																		
No unassigned risks identified in June.																		

PROJECT BASELINE PERFORMANCE Current Month (CM) (\$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	6.0	2.1	4.9	(3.9)	-65.2%	(2.8)	-132.6%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (-\$3.9M/-65.2%)

The CM negative schedule variance is due to a schedule slip of 10 working days due to wind impacts and a deliberate rate of demolition. The PFP team completed stairwells 1 and 2 but did not complete Zones 3, 4.1, and 7 as well as tunnels 1, 2, 3, and 6. The variance is also an artifact of the baseline change request (BCR) in April to incorporate the impact of stop works, demolition and decontamination (D&D) Labor Asset Management Program (LAMP) movement, and unexpected winter weather, which added a hotel load for 3.5 months in which all performance was taken up front.

CM Cost Variance: (-\$2.8M/-132.6%)

The CM negative cost variance is primarily attributed to labor and subcontract costs for lagging performance on demolition activities. Demolition of the remaining PFP structures has been slower than planned due to wind impacts and a deliberate rate of demolition and debris loadout. The deliberate rate of

demolition is appropriate to allow for proper sequencing and critical consideration of activities so they may be performed safely.

Contract-to-Date (CTD) (\$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	1,101.0	1,087.8	1,186.1	(13.2)	-1.2%	(98.3)	-9.0%	1,122.9	1,228.8	42.7	(105.9)

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Variance: (-\$13.2M/-1.2%)

The CTD schedule variance is within threshold.

CTD Cost Variance: (-\$98.3M/-9.0%)

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

Contributors to the negative cost variance include resumption actions associated with the December 2017 contamination event encompassing fixative applications, performing 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, a deliberate approach has resulted in slower progress on demolition, size reduction, and waste loadout. Process improvements, planning, and training activities to replenish D&D and RCT staffing support have additionally increased costs.

The negative cost variance is partially offset by the use of fewer breathing air suits (three suits per day versus five) and fewer hoses than originally planned for 242-Z entries. These reductions were the result of fewer fieldwork team members required to perform hands-on work in 242-Z due to the confined space.

In addition, recognized efficiencies contributed to negative variance offset, including crews completing process vacuum removal in 291-Z with reduced effort; characterization results indicating lower levels of hold-up, allowing for accelerated piping removal; isolations performed more efficiently by disconnecting the main electrical power from outside the 291-Z Facility versus individual isolations from within; hazardous material removal, stabilization, and decontamination more resourceful than anticipated (i.e., powerful fans used with vertical fixative flow up the stack); and additional efficiencies associated with 242-Z, 291-Z, and 234-5ZA demolition.

Variance at Completion (VAC): (-\$105.9M/-9.4%)

The unfavorable VAC reflects extended hotel load and field resource costs due to delays in demo-ready and demolition activities.

Overtime used to ready the 234-5Z Facility for demolition by September 2017 and unplanned work on the HDPE water loop also contributed to the unfavorable variance, which was partially offset by recognized efficiencies due to characterization data in 234-5Z, allowing piping and ducting to be left in place for demolition.

After the December 2017 contamination event, the EAC and VAC were adjusted to reflect a projected date of October 2019 to reach slab-on-grade at the PFP Facility.

In February 2019, BCR-011C-18-005R2 was issued to implement the RL-approved revised scope, cost, and schedule baseline for RL-0011.C2 project completion. The BCR set the remaining historical budgeted cost of work scheduled equal to the 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 in 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 was issued to implement the Global Settlement, which incorporated the impacts to the performance measurement baseline from the RL/CHPRC agreement on the settlement of pending PRC changes such as change proposals and request for equitable adjustments 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)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2019		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	70.0	65.4	4.6
RL-0011 - Total	70.0	65.4	4.6

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

FY2019 spending forecast for PBS RL-0011 is \$65.4 million for the continuation of demolition activities to achieve slab-on-grade. Projected funding is \$70.0 million.

Critical Path Analysis

The PFP critical path schedule begins with demolition completion of CSZ 3 and first bay A/C line duct level, followed by the remaining sections of Zones 4, 5, 6 and 7, except for the drain line. Remote Mechanical C and A process lines demolition and glovebox HA-46 loadout in parallel with the basement of 234-5Z demolition completion will begin after RL concurrence to resume high-risk demolition. The 234-5Z demolition is projected for completion by October 16, 2019. The 236-Z canyon demolition will resume with completion anticipated by December 18, 2019, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-083-00A – PFP Facility Transition and Selected Disposition Activities. Demolition completion will be followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities completing by mid-March 2020.

MILESTONE STATUS

The following table is a one-year look ahead to 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 Selected Disposition Activities	9/30/2017		12/18/2019	Demolition on 234-5Z progressing – 10-day slip from high winds delaying demolition and debris disposition in addition to the deliberate approach to demolition.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
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, acts as signatory on the shipping papers, and ensures compliance with DOE Manual 460.2-1A, <i>Radioactive Material Transportation Practices Manual</i> . RL arranges for Commercial Motor Vehicle Safety Alliance Level VI vehicle inspections and verifies that the government drivers meet the applicable U.S. 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 the approval of ancillary facility status change forms are complete to date. Upcoming DOE approval for the completion of 234-5Z will initiate a new facility status change form.

Section B

Spent Nuclear Fuel Stabilization and Disposition (RL-0012)

CH2MHILL
Plateau Remediation Company



R. M. Geimer
Vice President for
K Basin Operations

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Sludge Transport and Storage Container (STSC) 15 was filled with Engineered Container (EC) sludge from the 105KW fuel storage basin and shipped to T Plant on June 10, 2019. STSC 16 was filled with EC sludge from the 105KW fuel storage basin and is scheduled to be shipped to T Plant on June 25, 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	1	19	6/25/2019 – Employee strained an elbow while twisting a hook tool. Employee was examined at HPM Corporation and returned to work without restrictions. (25210)
Near Misses	0	1	N/A

KEY ACCOMPLISHMENTS

100K Operations

- The 100K Area operations group maintained facilities in a safe, 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 Area operations group performed preventive maintenance and calibrations on both engineered container retrieval and transfer system (ECRTS) and annex utility system components.
- STSC 15 was filled with sludge from the 105KW fuel storage basin and shipped to T Plant for placement into interim storage on June 10, 2019.
- STSC 16 was filled with sludge and is scheduled to be shipped to T Plant on June 25, 2019.

MAJOR ISSUES

Issue:

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

Engineered container (EC) sludge mass is likely greater than assumed in the baseline. The material-balance calculations that 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 ECs. If the actual sludge mass in the ECs (mass = density \times volume = $\rho \times V$) 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 are complete. Engineering personnel completed evaluations of settled density values in EC-250 and KE sludge, and provided final recommendations on the estimated number of STSCs (20 to 25 vessels) to complete the sludge campaign.

Status:

The 100K engineering personnel believe that the sludge density is between the design basis density and the average archived sample density established in PNNL-27704. White Paper PRC-STP-01119 details the current engineering knowledge from the first 12 STSCs and makes projections for the number of STSCs (20 to 25 vessels) that may be required to complete the sludge campaign. Sludge retrieval through STSC 16 continues to support the completion of bulk sludge retrieval in 22 STSCs; however, uncertainty remains due to the inability to monitor effectively the volumetric removal from EC-260 as retrieval progresses, and because no sludge has been removed from EC-240 to date. For risk mitigation, the project is procuring material for two additional STSCs within project breakdown structure (PBS) RL-0041.

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 June .																									
Realized Risks (Risks that are currently impacting project cost/schedule)																									
STP-152: Attrition, Acquisition, & Retention of Qualified Employees	Improving job markets/funding uncertainties or site wide 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 left the project to pursue other opportunities. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Monitor employee job satisfaction to evaluate/maintain morale.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Actively pursue filling open positions and train/qualify personnel.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Establish enhanced work schedule. (KWD7442)</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> Risk Recovery Assessment: No major changes in June . Since the initiation of sludge removal activities in June 2018, there has been greater than 25 percent attrition of qualified Nuclear Chemical Operators and radiological control technicians. The loss of qualified personnel has negatively impacted achieving sludge removal schedule goals. Both operations and radiation protection management have backfilled open positions. Training and qualification of new personnel is complete. Staffing levels appear to be adequate to support the remainder of the sludge retrieval mission.	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.	Complete	100	Establish enhanced work schedule. (KWD7442)	Complete	100									
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.	Complete	100																							
Establish enhanced work schedule. (KWD7442)	Complete	100																							
STP-153: Sludge Engineered Container End Point Criteria	ECF-100KR2-12-0040 Calculation for 105 KW Substructure Demolition Rubble Environmental Restoration Disposal Facility (ERDF) 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 understand that standard methods of sludge removal are unable to achieve EC sludge end point criteria efficiently. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Perform periodic video camera inspections throughout the sludge removal campaign to plan retrieval strategies.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Develop and submit Documented Safety Analysis/Technical Safety Requirement revisions that facilitate layering KW sludge (SCS-CON-210/220) with KE sludge (SCS-CON-240/250/260).</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Remove EC-210 lid to facilitate characterization and sampling. (KWD8955)</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Consider sampling heels in ECs to facilitate achieving end point criteria using more accurate source term.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Use EC-250 as proof of process to ensure that end point criteria can be achieved.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Update and submit a revised ERDF compliance calculation.</td> <td>9/30/19</td> <td>0</td> </tr> </tbody> </table> Risk Recovery Assessment: No major changes in June . 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 implemented a safety document revision that facilitates layering EC-210/220 sludge with KE sludge. Discussion between 100K Closure, U.S. Department of Energy, Richland Operations Office (RL), and the U.S. Environmental Protection Agency is ongoing to redefine the end point criteria for the ECs in the basin. An updated ERDF compliance calculation will be required to document the revision of the end point criteria.	Risk Recovery action(s)	FC Date	%	Perform periodic video camera inspections throughout the sludge removal campaign to plan retrieval strategies.	Ongoing	N/A	Develop and submit Documented Safety Analysis/Technical Safety Requirement 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 heels in ECs to facilitate achieving end point criteria using more accurate source term.	Complete	100	Use EC-250 as proof of process to ensure that end point criteria can be achieved.	Complete	100	Update and submit a revised ERDF compliance calculation.	9/30/19	0
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Unmitigated Risk Impacts	Assessment		Comments																		
	Month	Trend																			
RL-0012/WBS-012																					
<p>STP-156: Sludge Removal Campaign Impacted by Variations in Engineered Container Sludge Density/Volume</p>	<p>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.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$1,600K, 48 days</p>		<p>Risk Triggers: The actual sludge mass in the ECs (mass = density × 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.</p> <table border="1"> <thead> <tr> <th>Risk Recovery action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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 on PNNL-27769, STP K Basin Sludge Sample Archive Status FY2018. Determine if document revisions are required to complete sludge removal campaign. (KWD9010)</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Issue final sludge density evaluation, establishing total number of STSC necessary to complete sludge removal.(KWD9010)</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Risk Recovery Assessment: Engineering personnel are reviewing SRP basis documents to determine how the baseline project assumptions were impacted by sludge density assumptions. Set points were evaluated in February following the final review and completion of visual inspections of sludge currently stored in ECs SCS-CON-210/220/230,. 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. Following the completion of EC-250, the sludge material densities were re-evaluated, and a projection of the number of STSCs required to complete the campaign was developed. This evaluation will continue being updated as the campaign continues. Processing activities in June did not change the evaluation.</p>	Risk Recovery action(s)	FC Date	%	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.	Complete	100	Evaluate and implement feasible opportunities to more efficiently disposition remaining EC sludge. (KWD7442)	Complete	100	Complete bulk sludge removal from EC-250, which will facilitate establishment of KE Basin sludge density. (KWD6580)	Complete	100	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 on PNNL-27769, STP K Basin Sludge Sample Archive Status FY2018. Determine if document revisions are required to complete sludge removal campaign. (KWD9010)	Complete	100	Issue final sludge density evaluation, establishing total number of STSC necessary to complete sludge removal.(KWD9010)	Complete	100
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Issue final sludge density evaluation, establishing total number of STSC necessary to complete sludge removal.(KWD9010)	Complete	100																			
<p>STP-156-C: Sludge Removal Campaign Extended Due to Discovery of High Dose Material</p>	<p>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.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Likely (>90%)</p> <p>Worst Case Impacts: \$500K, 24 days</p>		<p>Risk Triggers: Additional sludge may be discovered that must be placed into ECs and processed with the balance of the EC sludge as 100K Closure Project personnel conduct characterization efforts in the 105KW Basin.</p> <table border="1"> <thead> <tr> <th>Risk Recovery action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Continue to monitor conditions identified by the baseline characterization efforts.</td> <td>Complete</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>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Risk Recovery Assessment: During May, 100K Closure personnel added high-dose material collected from the center bay into EC-230 to be removed from the 105KW Basin via STSCs. Processing of EC-230 has progressed to the point where sludge additions to EC-230 are no longer practical. An alternative disposition path will be developed if additional material is identified.</p>	Risk Recovery action(s)	FC Date	%	Continue to monitor conditions identified by the baseline characterization efforts.	Complete	N/A	Collect and quantify the volume and weight of the high-dose material in the 105 KW Basin. (KWD90111)	Complete	100	Update Sludge Campaign Documentation to disposition recently discovered high-dose material. (KWD90276)	Complete	100						
Risk Recovery action(s)	FC Date	%																			
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Update Sludge Campaign Documentation to disposition recently discovered high-dose material. (KWD90276)	Complete	100																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																					
No critical risks identified in June.																					
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																					
No high threat value risks identified in June.																					
FY2019 Risk Triggers (Risk could be realized in FY2019)																					

Unmitigated Risk Impacts	Assessment		Comments																		
	Month	Trend																			
RL-0012/WBS-012																					
<p>STP-073-C: Processing Efficiency - Retrieval & Shipping</p> <p>The realized processing efficiency associated with sludge retrieval and shipping operations does not match the baseline plan.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$0K, 54 days</p>	●	↔	<p>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.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Mitigation Assessment: No major changes in June. Project personnel completed a revised plan to establish the appropriate campaign schedule and accounting for ion exchange module (IXM) change outs and preventive maintenance activities performance. Additionally, KBO put the sludge removal campaign personnel on a five-day work week (minimum), effective February 2019. The team continues to transfer material from EC-260, and the material handling is different from previous ECs. The team will continue monitoring the efficiency associated with the sludge retrieval process.</p>	Mitigation action(s)	FC Date	%	Establish a production control center to facilitate maximum efficiency integrating SRP operations and maintenance activities.	Complete	100	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.	Complete	100	Revise plan to establish the appropriate campaign schedule.	Complete	100						
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Revise plan to establish the appropriate campaign schedule.	Complete	100																			
<p>STP-108: STP Annex Equipment and ECRTS/Ancillary System Reliability</p> <p>Required corrective maintenance on the STP annex and the ECRTS equipment is higher than planned due to unique system design or sludge characteristics, resulting in cost and schedule impacts.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%)</p> <p>Worst Case Impacts: \$400K, 66 days</p>	●	↑	<p>Risk Triggers: Required corrective maintenance on the SRP and ancillary equipment is higher than planned.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct full-scale testing at the Maintenance and Storage Facility to determine baseline for Corrective Maintenance and Preventative Maintenance 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 skimmer pump and IXM pump to accommodate an alternative IXM water source. (KWD90076, 86, and 91)</td> <td>8/15/19</td> <td>75</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in June. Due to IXM system challenges (potential unavailability), an alternate water supply modification has been generated and hardware fabricated. Plans have been developed to install this modification in the future if necessary to mitigate any major issues encountered. The facility IXM system continues to be reliable and modification will impact processing efficiency; therefore, field work is suspended pending a major system failure.</p>	Mitigation action(s)	FC Date	%	Conduct full-scale testing at the Maintenance and Storage Facility to determine baseline for Corrective Maintenance and Preventative Maintenance program.	Complete	100	The project will provide spare parts for critical or long-lead components.	Complete	100	Develop PM activities prior to construction completion to optimize maintenance costs.	Complete	100	Perform reliability, availability, and maintainability analysis.	Complete	100	Modifications to skimmer pump and IXM pump to accommodate an alternative IXM water source. (KWD90076, 86, and 91)	8/15/19	75
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Modifications to skimmer pump and IXM pump to accommodate an alternative IXM water source. (KWD90076, 86, and 91)	8/15/19	75																			
Unassigned Risks (Pending ownership of identified threats/opportunities)																					
No unassigned risks identified in June.																					

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$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	1.4	1.6	1.5	0.3	18.8%	0.1	7.4%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$0.3M/+18.8%)

The variance is within reporting thresholds.

CM Cost Performance (+\$0.1M/+7.4%)

The variance is within reporting thresholds.

Contract-to-Date (CTD)

(\$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	756.2	755.6	725.8	(0.6)	-0.1%	29.7	3.9%	761.1	730.2	4.4	30.9

Numbers are rounded to the nearest \$0.1 million

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

The variance is within reporting thresholds.

CTD Cost Performance (+\$29.7M/+3.9%)

The variance is within reporting thresholds.

Variance at Completion (+\$30.9M/+4.1%)

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		Variance
	Projected Funding	Spending Forecast	
Expense – Spending Forecast	20.1	17.0	3.1
Incremental Scope Pending Change Management	0.0	0.0	0.0
Expense – Subtotal	20.1	17.0	3.1
Line Item (LI)	0.0	0.0	0.0
Incremental Scope Pending Change Management	0.0	0.0	0.0
LI – Subtotal	0.0	0.0	0.0
RL-0012 – Total	20.1	17.0	3.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

FY2019 funding for PBS RL-0012 reduced from \$31.4 to \$20.1 million in June after deobligation of \$11 million remaining after completion of the Sludge Removal Project. FY2019 funding aligns with the RL Integrated Priority List.

Critical Path Analysis

The project critical path schedule runs through completion of retrieval operations, including the filling of STSCs with sludge and their transporting to the T Plant canyon for interim storage. 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*, on or 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		09/30/2019	On Schedule.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

None currently identified.

Section C

Solid Waste Stabilization and Disposition (RL-0013)

CH2MHILL
Plateau Remediation Company



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

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

M. A. Wright
Vice President for Project
Technical Services

PROJECT SUMMARY

During the June reporting period (May 27 to June 23, 2019), the Waste and Fuels Management Project (W&FMP) maintained facilities in a safe and compliant condition. The River Risk Management Project operated the Environmental Restoration Disposal Facility (ERDF) and continued document preparation for the Integrated Disposal Facility (IDF) permits.

This month, the following items were accomplished:

- At the Waste Encapsulation Storage Facility (WESF), the W-135 Management of the cesium (Cs) and strontium (Sr) Capsules Project team completed the final design for the WESF modifications. Project review comments are being incorporated into the draft statement of work (SOW) for the capsule storage area (CSA) construction subcontract. Revised design media for the CSA has been completed for incorporation into a request for proposal (RFP). Proposals for the construction of the Maintenance and Storage Facility (MASF) Cs/Sr capsule handling mockup facility have been reviewed by the source selection board and recommendations provided to procurement for award in July.
- The 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 15 was received on June 10, 2019.

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	100%
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 Canister Storage Building 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	59%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred (DART)	0	1*	*1 DART, PTS in support of RL-0013.
Total Recordable Injuries	0	1*	*1 Recordable Injury, PTS in support of RL-0013.
First Aid Cases	4	27	<p>6/5/2019 – Employee was walking in a parking lot, tripped on curbing and fell to the ground abrading their right forearm above the elbow. Employee was taken to HPMC Corporation (HPMC) and then released to work without restrictions. (25189)</p> <p>6/11/2019 – Employee bumped right elbow on the edge of a cabinet. Employee was taken to HPMC and then released to work without restrictions. (25194)</p> <p>6/13/2019 – Employee received a left thumb injury after their glove became entangled on a drill bit while holding an electrical panel for another employee to begin drilling pilot holes. Both employees were wearing the appropriate personal protective equipment for the task (shop work). Employee was taken to HPMC and then released to work without restrictions. (25199)</p> <p>6/26/2019 – Employee was assisting with placement of a reeving cable onto a wooden pallet when the cable “flopped” onto the pallet and the tag end struck the employee’s foot. Employee was taken to HPMC and then released to work without restrictions. (25219)</p>
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Waste and Fuels Management Project

13.01 Project Management

- Finalizing detailed planning for the CHPRC Post Contract Baseline deliverable to the U.S. Department of Energy (DOE), Richland Operations Office (RL) addressing fiscal years (FY) 2020, FY2021, and FY2022.
- Distributed the draft Low Level Burial Grounds (LLBG) Green Islands Closure Plan addendum for joint RL and CHPRC review on May 28, 2019.
- Distributed the redline edits and comment responses for the LLBG Process Information addendum for state of Washington Department of Ecology (Ecology) review on May 30, 2019. The revised document incorporates Ecology’s comments.
- Distributed the redline edits for the Central Waste Complex-Waste Receiving and Processing (CWC-WRAP) Waste Analysis Plan for joint RL and CHPRC review on June 13, 2019.

- Completed incorporation of Ecology comments into the CSA permit addenda, and obtained Ecology concurrence with the proposed changes.

13.02 Capsule Storage & Disposition

- Completed two operational drills at WESF.
- Completed a facility outage and replacement of Panels A and C (heating, ventilation, and air condition electrical panel).
- Continued canyon entries in support of the W-135 project. Continued maintenance work on the 15-ton canyon crane. Completed painting of the load block and decontamination of the drum.
- Completed 33 preventative maintenance (PM) packages.

13.03 Canister Storage Building

- Performed roof repairs at CSB 2701-HV.
- Continued multi-canister overpack port seal testing. Engineering analysis of test data and report preparation is in progress and expected to conclude in July.
- Completed 28 PM packages.

13.06 Transuranic Repackaging

- Completed repackaging of 43.4 cubic meters of transuranic mixed (TRUM) and transuranic (TRU) waste in June, for a total of 366.4 cubic meters fiscal year to date (FYTD).

13.07 Waste Receiving and Processing (WRAP)

- Completed exhaust fan replacements at WRAP.
- Completed 217 surveillances and 19 PM packages.

13.08 T Plant

- Completed 214T roof repairs.
- Completed 496 surveillances and 23 PM packages.

Sludge Receipt

- Received receipt of STSC 15 on June 10, 2019, from 105KW and placed into interim storage in the T Plant Canyon.

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

- Completed 241 surveillances and 12 PM packages.
- Received 12 standard waste boxes from Perma-Fix Northwest (PFNW) into CWC in two shipments.
- Shipped two Super 7As from CWC to PFNW in two shipments.

13.15 TRU Disposition

- Continued enhancement of acceptable knowledge on TRU-waste streams, completing the fifth of 10 waste streams.

13.16 Offsite Spent Nuclear Fuel Disposition

- Maintained coordination of offsite spent nuclear fuel disposition.

13.21 Mixed Waste Disposal Trenches

- Completed 156 surveillances.
- Received four boxes from PFNW into Mixed Waste Trench (MWT) 31 in one shipment.
- Received three boxes from PFNW into MWT 34 in one shipment.

13.24 Management of Cesium and Strontium Capsules Project

- Completed the final design for the WESF Modifications.
- Proposals for the construction of the MASF Cs/Sr capsule handling mockup facility have been reviewed by the source selection board and recommendations provided to procurement for award in July.

13.25 Capsules Interim Storage Operations

- The subcontractor worked on preparation of a fabrication cost estimate variance analysis based on the final design media. A meeting has been scheduled with CHPRC project and procurement personnel to review the variance analysis prior to submittal.

River Risk Management Project**13.10 Environmental Restoration Disposal Facility**

- Received 11,108 tons of waste for disposal in June.
- Received 101,981 tons of waste for disposal FYTD.
- Received 83 shipments (1,287 tons) of Plutonium Finishing Plant waste using the new enhanced radiological controls during disposal operations.

13.12 Integrated Disposal Facility (IDF)

- Care and Custody
 - Completed June routine monthly inspections.
 - Completed seven significant storm event inspections.
 - Completed quarterly inspections.
- IDF Operational Readiness
 - Obtained determination that the current ecological/cultural clearance is sufficient to begin construction within existing IDF boundaries.
 - Engaged CHPRC's Project Delivery function to initiate planning and procurements for FY2020 construction.
- Resource Conservation and Recovery Act (RCRA) Permit Modifications.
 - Completed internal CHPRC/RL comment resolution for RCRA Permit Addendum A, Part A; Addendum B, Waste Analysis Plan; Addendum C, Process Information; Addendum F, Preparedness and Prevention; Addendum G, Training; Addendum H, Closure Plan; Addendum I, Inspection; and Addendum K, Post-Closure.
 - Prepared responses to Ecology review of Addendum E, "Security".
 - Continued development (with Environmental Program and Strategic Planning) of strategy for obtaining a variance to allow in-trench treatment for large equipment for IDF.

Project Technical Services Support

- W135 –Construction
 - Finalizing CSA scope of work. Commenced draft of the RFP.
 - Received contractor bids for the W-135 MASF mockup. Evaluation ongoing.
- T Plant – West Face Exterior Stairs & Firestop Wall Repair
 - Completed removal and replacement of H-5 and H-3 stairs. Anchor install pending.
 - Performed demo at door H-1. Concrete stoop formed and poured.
 - Finalizing work change notice to incorporate radiation controls to resume work at door H-7.
 - Completed investigations for T Plant Spalling Investigations.
- CWC/WRAP and T Plant Roof Repair
 - Completed repair work to Building 214T.
 - Commenced roof repairs at 2402WB (45 percent complete to date).
- Trench 31 and 34 Survey
 - Completed topographical survey of trenches and surrounding area. Final report submitted.
- WESF Metal Shed and Kitchen Remodel
 - Completed mechanical and draft electrical Facility Management Plan.
 - Scope of work finalized and issued RFP.
 - Contractor pre-bid walk down performed.
- Training and Procedures
 - Published several Integrated Disposal Facility changes (IDF-PRO-MN-54372, IDF-PRO-OP-53941 and IDF-PRO-OP-54357) for consistency with respect to Roles and Responsibilities and Limitations, and their alignment with work performance.

- Project Delivery
 - o IDF Infrastructure
 - Continued draft of procurement packages for the Mobile office trailers.
 - Commenced draft of scope of work for earthworks scope.

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 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 and on January 31, 2019, Ecology issued a completeness determination for the CSA permit application and determined the permit application is complete. In conjunction with the letter, Ecology provided formal copies of the technical comments on the addenda. W&FMP resolved the technical comments and are preparing the revised documents. The *Capsule Storage Area Final Design Report* was provided to Ecology on May 2, 2019. Ecology has tentatively approved the comment responses, and CHPRC anticipates that additional design detail will not be needed to support issuance of the draft permit for public comment.

Issue:

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

Corrective Action:

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 additional FY2019 TRU commercial repackaging, allowing shipments to PFNW for repackaging to continue throughout the year.

Issue:

It was determined by dynamometer that the WESF truckport cover block weight is 30,900 pounds, which is three percent higher than the historical baseline documents. 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 associated with this vintage/model of crane exist.

Status:

A contract was placed with a recognized crane vendor and additional discussions have taken place. These discussions resulted in the vendor suggesting a visual inspection of the gearbox gears, final drive gear, and pinion gear. On June 11, 2019, the recommended visual inspection was conducted by CHPRC and the vendor representative. The inspection did identify some minor wear and pitting on the final drive gear, which was expected due to the age of the crane. Considering the inspection results, the vendor concurred that placing the crane back in service after completion of the other in-progress maintenance activities would be appropriate. The crane is currently being reassembled in preparation for functional testing.

Issue:

On August 14, 2018, notification was received (18-AMRP-0151) informing CHPRC that RL is supportive of enhancing the operating margin for the Cs 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 Cs 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 Cask Storage System (CSS) final design has been approved.

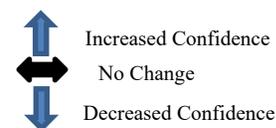
Status:

Analysis of the Hastelloy emissivity has been completed resulting in one additional strontium cask. Analysis for increasing the Cs thermal storage margin indicates three additional Cs casks will be required to reduce the salt-metal interface temperature to 269 degrees. CHPRC submitted a letter to RL on June 20, 2019, with the preliminary results and requested direction to implement the new operating temperature.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0013/WBS-013										
Explanation of major changes to the project monthly spotlight chart: Risk WSD-CSS-011: <i>Greater Than Expected Comments on CSS Design are Received</i> will be closed in the FY19 risk database and removed from the risk spotlight chart next reporting period. Risk WSD-CSA-015: <i>PDSA Comments Results in Schedule Delays</i> has been added to the FY19 Risk Trigger section to capture the risk exposure associated with DOE comments to the PDSA.										
Realized Risks (Risks that are currently impacting project cost/schedule)										
13-RCRA-REV9-001: RL-13 - Additional dangerous waste management units (DWMUs)	Unplanned 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. <table border="1" style="width: 100%;"> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> <tr> <td>Incorporating changes to respond to comments.</td> <td>Ongoing</td> <td>N/A</td> </tr> </table> Risk Action Assessment: No significant changes in June. The impacts associated with the realization of this risk are ongoing. As such, this risk will continue to be reported for visibility until it no longer poses a threat to the project.	Risk Recovery Action(s)	FC Date	%	Incorporating changes to respond to comments.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%								
Incorporating changes to respond to comments.	Ongoing	N/A								
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. <table border="1" style="width: 100%;"> <tr> <th>Risk Recovery 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> Risk Action Assessment: No significant changes in June. 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.	Risk Recovery Action(s)	FC Date	%	None identified at this time.	N/A	N/A
Risk Recovery Action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
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 rework, 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. <table border="1" style="width: 100%;"> <tr> <th>Risk Recovery 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> Risk Action Assessment: No significant changes in June. 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.	Risk Recovery Action(s)	FC Date	%	None identified at this time.	N/A	N/A
Risk Recovery Action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No critical risks identified in June.										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
WSD-013B: TRU Waste Volumes or Characteristics - Processing	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: Low (10% to 25%) Worst Case Impacts: \$500K, 0 day			<p>Risk Trigger Metric: A significant volume of newly generated waste is received or nonconforming waste results in the need for new capabilities.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in June. 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.</p>	Mitigation Action(s)	FC Date	%	None identified at this time.	N/A	N/A						
Mitigation Action(s)	FC Date	%														
None identified at this time.	N/A	N/A														
WSD-097: Major Equipment Failure – T Plant	T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts and schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$3 million, 96 days			<p>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 contract</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Mitigation Assessment: No significant changes in June. The project has put into place mitigating strategies (i.e., aggressive surveillance and maintenance 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.</p>	Mitigation Action(s)	FC Date	%	Identify and procure critical spare parts for the T Plant crane.	Ongoing	N/A	Implement aggressive CM/PM program.	Ongoing	N/A			
Mitigation Action(s)	FC Date	%														
Identify and procure critical spare parts for the T Plant crane.	Ongoing	N/A														
Implement aggressive CM/PM program.	Ongoing	N/A														
WSD-136: CWC/WRAP Components Fail	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			<p>Risk Trigger Metric: Maintenance activities at CWC increase due to aging facilities.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Floor repairs, Master Documented Safety Analysis (MDSA) container stacking requirements, replacement of exhaust fans.</td> <td>Ongoing</td> <td>50%</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>50%</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in June. The WRAP roof was analyzed for structural integrity following water intrusion. There was insufficient basis for the roof's integrity, which will lead to an eventual roof replacement, planned for FY2020 through FY2021, pending weather conditions. The MDSA container stacking requirements are complete. Maintenance work at CWC will be scheduled based on facility work priorities. Additional fire alarm control unit spare parts were obtained from the deactivation of 2727W.</p>	Mitigation Action(s)	FC Date	%	Floor repairs, Master Documented Safety Analysis (MDSA) container stacking requirements, replacement of exhaust fans.	Ongoing	50%	Conduct fieldwork for 2727W deactivation.	Complete	100	Conducting doorframe replacements and electrical equipment repairs as necessary.	Ongoing	50%
Mitigation Action(s)	FC Date	%														
Floor repairs, Master Documented Safety Analysis (MDSA) container stacking requirements, replacement of exhaust fans.	Ongoing	50%														
Conduct fieldwork for 2727W deactivation.	Complete	100														
Conducting doorframe replacements and electrical equipment repairs as necessary.	Ongoing	50%														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																		
		Month	Trend																			
RL-0013/WBS-013																						
WSD-CSA-006: Ecology Temporary Authorization contingent on 90% Design for CSA RCRA Permit Application	Ecology will, as a pre-condition to approve the temporary authorization (TA) for CSA construction, require that the CSA 90 percent detailed design package 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	●	↔	<p>Risk Trigger Metric: Ecology requires the 90 percent design package for the CSA to be completed prior to issuing the permit for public comment.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in June. 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, primarily associated with the need for additional design information. CHPRC/RL submitted supplemental design information for the WESF modifications and CSA to RL in May. Ecology has determined that the permit application is now complete. Ecology is reviewing the 90 percent design package that was submitted on May 2, 2019. CHPRC is currently resolving Ecology comments on the Part B permit application. CHPRC is preparing the TA to begin CSA construction ahead of the full permit approval since it will not be issued before planned start of CSA construction.</p>	Mitigation Action(s)	FC Date	%	None identified at this time.	N/A	N/A												
Mitigation Action(s)	FC Date	%																				
None identified at this time.	N/A	N/A																				
FY2019 Risk Triggers (Risk could be realized in FY2019)																						
WSD-125: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues	A pause in waste processing results in an unexpected container degradation within 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	●	↑	<p>Risk Trigger Metric: Degraded containers are discovered in CWC.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Mitigation Assessment: No significant changes in June. The project continued to perform container surveillances in June 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.</p>	Mitigation Action(s)	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	Ongoing	N/A	Manage a "watch list" of waste containers that have shown signs of degradation or are associated with degraded containers.	Ongoing	N/A	Process waste packages at a rate funded by RL.	Ongoing	N/A	Procuring stainless steel 85-gallon over-packs for alternative storage of containers that show signs of degradation.	Complete	100	FY2019 Over-packs planned: 200	9/25/2019	0
Mitigation Action(s)	FC Date	%																				
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Procuring stainless steel 85-gallon over-packs for alternative storage of containers that show signs of degradation.	Complete	100																				
FY2019 Over-packs planned: 200	9/25/2019	0																				
WSD-W135-19: Unexpected Contamination is Found in the WESF Facility	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	●	↑	<p>Risk Trigger Metric: During WESF preparations for equipment installation (in the G Cell, the canyon, or the truckport) 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).</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Mitigation Assessment: No significant changes in June. Waste packaging in the canyon is substantially complete; however, waste removal is impacted by WESF canyon crane and truckport cover block weight issues. To date, no excessive contamination has been discovered in the canyon. Decontamination efforts in G Cell are complete.</p>	Mitigation Action(s)	FC Date	%	Hire additional supervisor and RADCON workers to remain in compliance with stringent rad controls.	Ongoing	N/A	Implement lessons learned.	Ongoing	N/A	Continuously utilize respiratory protection.	Ongoing	N/A						
Mitigation Action(s)	FC Date	%																				
Hire additional supervisor and RADCON workers to remain in compliance with stringent rad controls.	Ongoing	N/A																				
Implement lessons learned.	Ongoing	N/A																				
Continuously utilize respiratory protection.	Ongoing	N/A																				

Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0013/WBS-013																			
WSD-W135-31: Canyon Crane non-functional/not Serviceable	<p>The WESF crane is put back into limited usage for the W-130 Project; however, the crane is found to be unserviceable, or fails during the W-135 operational activities.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$300K, 96 days</p>	●	↔	<p>Risk Trigger Metric: The canyon crane fails during use or cannot be returned to service after maintenance.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure new crane hook and block.</td> <td>Complete</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> </tbody> </table> <p>Mitigation Assessment: Performance of the full annual preventive maintenance package is complete. As part of mitigation actions for the canyon crane capacity issue, the 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. A contract was placed for technical support for the inspections. Inspection of the crane gear box is complete and found no evidence of stress fractures. Wire rope removal is complete. Installation of the new wire rope is planned for July. If full refurbishment of the crane is unsuccessful, replacement of the canyon crane as a like-for-like is not possible, as the original manufacturer is no longer in business. A similar replacement hook and block have been procured.</p>	Mitigation Action(s)	FC Date	%	Procure new crane hook and block.	Complete	100	Perform preventive/corrective maintenance procedures (i.e. replacement of the wire rope and hook) on the crane early to identify corrective maintenance issues.	9/30/19	50	Refurbish current crane block.	9/30/20	0	Procure critical spares.	9/30/21	0
Mitigation Action(s)	FC Date	%																	
Procure new crane hook and block.	Complete	100																	
Perform preventive/corrective maintenance procedures (i.e. replacement of the wire rope and hook) on the crane early to identify corrective maintenance issues.	9/30/19	50																	
Refurbish current crane block.	9/30/20	0																	
Procure critical spares.	9/30/21	0																	
WSD-CSS-002: Subcontractor Change Orders and Claims	<p>The CSS construction contractor submits excessive change orders and claims, resulting in schedule delays and increased subcontractor cost.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$2,900K, 24 days</p>	●	↔	<p>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.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Contract 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> </tbody> </table> <p>Risk Action Assessment: No significant changes in June. CSS final design has been issued. The contractor has obtained fixed price bids for fabrication and is preparing a variance analysis and proposal for fabrication, due in July. Contract award for CSS equipment fabrication will require CHPRC technical review, independent 3rd party audit, and RL consent. Submittal of consent package to DOE is planned for September. Fabrication of CSS equipment is not planned until FY2020.</p>	Risk Recovery Action(s)	FC Date	%	Contract 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.	Complete	100	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.	Ongoing	N/A						
Risk Recovery Action(s)	FC Date	%																	
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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.	Ongoing	N/A																	
WSD-CSS-011: Greater than Expected Comments on CSS Design are Received	<p>The CSS design receives more comments than originally expected, resulting in schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$600K, 48 days</p>	●	↑	<p>Risk Trigger Metric: CSS final design review comment resolution exceeds the time planned due to volume or difficulty in comments.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>CHPRC will provide recommendations for comment resolution, minimizing the effort to respond.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>CHPRC will work closely with NAC during comment resolution to ensure all comments are understood.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in June. The CSS final design has been issued. This risk will be closed, and removed from this section in the next reporting period.</p>	Mitigation Action(s)	FC Date	%	CHPRC will provide recommendations for comment resolution, minimizing the effort to respond.	Complete	100	CHPRC will work closely with NAC during comment resolution to ensure all comments are understood.	Complete	100						
Mitigation Action(s)	FC Date	%																	
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CHPRC will work closely with NAC during comment resolution to ensure all comments are understood.	Complete	100																	

Risk Title	Unmitigated Risk Impacts	Assessment		Comments								
		Month	Trend									
RL-0013/WBS-013												
<p>WSD-CSA-015: PDSA Comments Result in Schedule Delays</p> <p>Comments on the PDSA received from RL are not able to be resolved within the allotted time frame provided in the baseline schedule, or impact design aspects of the CSS, resulting in cost and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Likely (75% to 90%) Worst Case Impacts: \$600K, 48 days</p>			<p>Risk Trigger Metric: CHPRC receives DOE comments on the CSA PDSA that required additional analysis to the CSS final design. Depending on the results of the analysis, the CSS final design may need to be modified.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct working meetings with RL to work through CSA PDSA comments quickly and identify needs for additional analysis early.</td> <td>9/30/19</td> <td>20</td> </tr> <tr> <td>Work with RL to resolve critical comments to CSA PDSA such that approval which allows completion of additional analysis prior to submittal of final DSA can be provided.</td> <td>9/30/19</td> <td>20</td> </tr> </tbody> </table> <p>Mitigation Assessment: Project team has been participating in meetings with RL and EA-31 nuclear safety to understand comments and agree on a path forward for resolution.</p>	Mitigation Action(s)	FC Date	%	Conduct working meetings with RL to work through CSA PDSA comments quickly and identify needs for additional analysis early.	9/30/19	20	Work with RL to resolve critical comments to CSA PDSA such that approval which allows completion of additional analysis prior to submittal of final DSA can be provided.	9/30/19	20
Mitigation Action(s)	FC Date	%										
Conduct working meetings with RL to work through CSA PDSA comments quickly and identify needs for additional analysis early.	9/30/19	20										
Work with RL to resolve critical comments to CSA PDSA such that approval which allows completion of additional analysis prior to submittal of final DSA can be provided.	9/30/19	20										
Unassigned Risks (Pending ownership of identified risks/opportunities)												
No unassigned risks identified in June.												

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	12.9	11.9	10.6	(0.9)	-7.3%	1.4	11.4%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$0.9M/-7.3%)

The CM negative schedule variance is a result of the early subcontractor completion of the revised CSS final design package to CHPRC, and updating the calculations based upon the revised loading plan and thermal analysis in a prior period. A delay in completing the crane wire rope replacement for WESF preparations, due to additional information from crane manufacturers and the need to perform detailed inspections of the crane gear box, also contributed to the variance. Additionally, delayed work on Closure Plan activities has resulted in a negative schedule variance.

CM Cost Performance (+\$1.4M/+11.4%)

The CM positive cost variance is a result of an adjustment for work performed in prior periods in the IDF Facility Modifications account. This was authorized via implementation of BCR-013-008R0 "Changes to FY2019 IDF Design Estimate." In addition, ERDF Disposal account had staffing reductions, decreases in disposal work and monthly reconciliation of costs for the disposal subcontract resulted in a positive cost variance.

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	1,443.1	1,439.7	1,348.9	(3.4)	-0.2%	90.8	6.3%	1,485.6	1,392.4	43.5	93.2

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (-\$3.4M/-0.2%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+\$90.8M/+6.3%)

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 (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 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 (+\$93.2M/+6.3%)

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)

WBS 013/RL-0013	FY2019		Variance
	Projected Funding	Spending Forecast	
Waste Stabilization & Disposition	173.5	147.8	25.8
Management of Cesium and Strontium Capsules (Line Item)	6.6	3.6	3.1
Incremental Scope Pending Change Management	0.0	(2.5)	(2.5)
RL-0013 – Total	180.1	153.9	26.4

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2019 projected funding level for PBS RL-0013 of \$180.1 million is based on the RL integrated priority list. The FY spending forecast of \$153.9 million reflects FYTD efficiencies and the current cost projection as of June for work to be complete in FY2019.

Critical Path Analysis

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	6/30/2019		6/30/2019	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 Level VI vehicle inspections and verifies that the government drivers meet the applicable U.S. 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 treatment, storage, and disposal 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)	7/11/2019
CSA CD2/3 – RL: Review/Approve PDSA (1 st FY)	5/16/2019 (A)	9/12/2019
RL Review IDF DSA	7/16/2019	9/3/2019
RL Final IDF DSA Review and SER Prep	9/16/2019	10/1/2019

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

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

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 (GW) treatment completed in June 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	28.0	236.6	1.7	20.8						
HX P&T	24.0	198.4	2.1	18.8						
KR-4 P&T	11.6	100.1	0.2	1.3						
KW P&T	10.3	109.8	7.0	10.9						
KX P&T	39.2	349.5	2.4	20.2						
200 West P&T	90.3	807.1	6.2	66.5	155	1,482	1.61x10 ¹¹	1.58x10 ¹²	7.6	64.2
Combined	203.7	1,801.7	19.6	138.4	155	1,482	1.61x10¹¹	1.58x10¹²	7.6	64.2
FY2019 KPG	--	1,800.0	--	N/A	--	N/A	--	N/A	--	N/A

Well Drilling Completion by Area*	FY2019 Planned	Current Calendar Month	FY2019 Cumulative
100-KR-4	2	0	2
100-HR-3	10	0	10
200-BP-5	4	0	0
200-UP-1	3	1	1
200-ZP-1	5	2	3
M-24 Milestone	7	1	1
100-F/IU	6	0	0
Total Wells	37	4	17
Site Wide Boreholes	9	0	9

*Well drilling "completion" indicates achieving all drilling activities (drill, construct, develop, complete).

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	75%
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 Field Logging & Electronic Data Gathering FLEDG 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	1	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	0	14	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

River Corridor

300-FF-5 Operable Unit (OU)

- Completed the sequential extraction and leach testing of Stage B Uranium Sequestration post-injection soil samples. This data will be used during the development of groundwater models to evaluate the effectiveness of the Stage B sequestration efforts. Laboratory analysis associated with this testing is on schedule to complete in July 2019.

100-BC-5 OU

- Transmitted the Revision 0 Remedial Investigation/Feasibility Study (RI/FS) report to RL on June 18, 2019.

100-HR-3 OU

- Submitted the Draft A Well Installation Sampling Analysis Plan (SAP) for 100-HR-3 Groundwater Operable Unit to RL for State of Washington Department of Ecology (Ecology) review on May 31, 2019. RL forwarded the document to Ecology on June 3, 2019.

100-KR-4 OU

- Continued infiltration of the KW Soil Flushing Treatability Test. Approximately 9.6 million gallons of water have been sent to the infiltration gallery. This completes the first of four cycles of the soil flushing treatability test.

Central Plateau

200-BP-5 and 200-PO-1 OUs

- Initiated construction of monitoring Well 299-E28-34 on June 18, 2019.

200-UP-1 OU

- Completed construction on Well 299-W19-131 on June 5, 2019.
- Transmitted the Draft A Revision 1 Performance Monitoring Plan to RL on June 6, 2019, for subsequent transmittal to the U.S. Environmental Protection Agency (EPA) for their review.

200-DV-1 OU

- Briefed RL on the approach for increasing perched water extraction on June 13, 2019. As development of the data quality objective/SAP continues. This briefing is in preparation for an upcoming meeting with Ecology in July 2019.
- Briefed RL on June 20, 2019, on the development of the 200-DV-1 Laboratory Treatability Test Plan. This test plan is a result of a comprehensive evaluation of currently available Deep Vadose Zone technologies for 200-DV-1 OU that was recently completed.

200-ZP-1 OU

- Continued construction of extraction well 699-48-70 and monitoring well 699-44-70B on June 22, 2019.
- Briefed RL on the Ringold A Characterization SAP approach on June 19, 2019. The approach proposes drilling eight of the 12 monitoring wells, including locations, while the remaining four well locations are being identified through probabilistic optimization analyses that includes fate and transport modeling combined with continuation of the data gap analysis process.

200-EA-1 OU

- Obtained Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) member signature on the polychlorinated biphenyls congener Interagency Management Integration Team agreement form on June 20, 2019.

TPA-M-24-00 Well Drilling

- Completed construction of the M-24 monitoring Well 399-4-16 at 300-FF-5.

Central Plateau Closure Plans

- Transmitted the 241-CX Tanks Closure Plan to RL and Ecology for concurrent review on June 19, 2019.
- Transmitted the 216-S-10 Pond and Ditch Closure Plan to RL and Ecology for concurrent review on June 20, 2019.

Groundwater Sciences

- Completed certification of the engineering evaluation reports for Nonradioactive Dangerous Waste Landfill (NRDWL), A-Farm, and C-Farm.

Project Technical Services Support

- Training and Procedures updated SGRP-PRO-MN-50161 (GW-PM-814), Monthly GFCI Receptacle/Breaker Test. This update was completed to comply with changes to DOE-0359, Hanford Site Electrical Safety Program.
- Operations Program conducted Controlling Organization Administrator qualification interview in support of lockout/tagout program implementation.
- Project Delivery
 - o Mobilized material, tools and equipment for 100-HR-3 wells 199-H3-21, 199-H3-22, 699-97-47C, and 199-H1-12.
 - Completed work on 199-H3-21. Construction completion document (CCD) signed off.
 - Commenced work on 199-H3-22. Bonding was completed and greenfield work is ongoing.
 - Completed layout and bonding of HDPE on 199-H1-12.
 - Commenced layout and bonding of HDPE on 699-97-47C.
 - Completed initial construction activities for 200-AP-1 well 699-48-70 (YE33)/699-47-788 (YJ35).

- Final tie-in pending the completion of the wells.
- o Completed the permanent power installation at MO651. CCD signed off.

Groundwater P&T Facilities

200 West P&T

- Operated the 200 West P&T at an average of 2,098 gallons per minute (gpm) in June 2019.

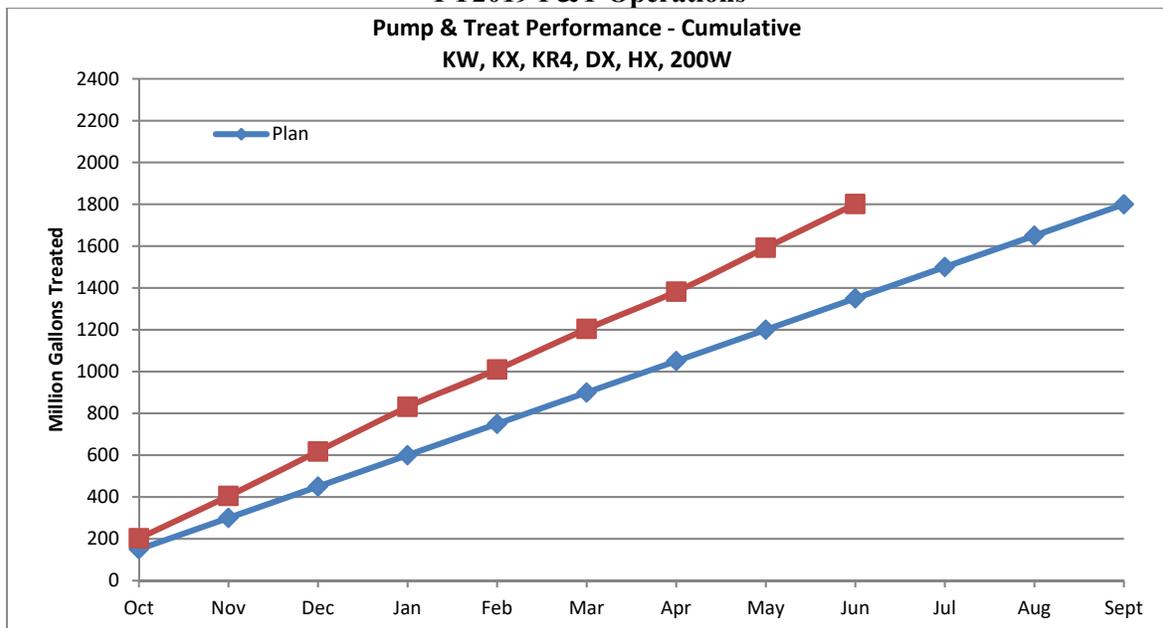
100 Area P&Ts

- Operated the DX P&T at 649 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 268 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 239 gpm, below the facility capacity of 330 gpm. Continued operations of the soil infiltration gallery.
- Operated the KX P&T at 907 gpm, above the facility capacity of 900 gpm.
- Operated the HX P&T at 556 gpm, below the facility capacity of 900 gpm. Completed tie-in of new extraction well 199-H3-21.

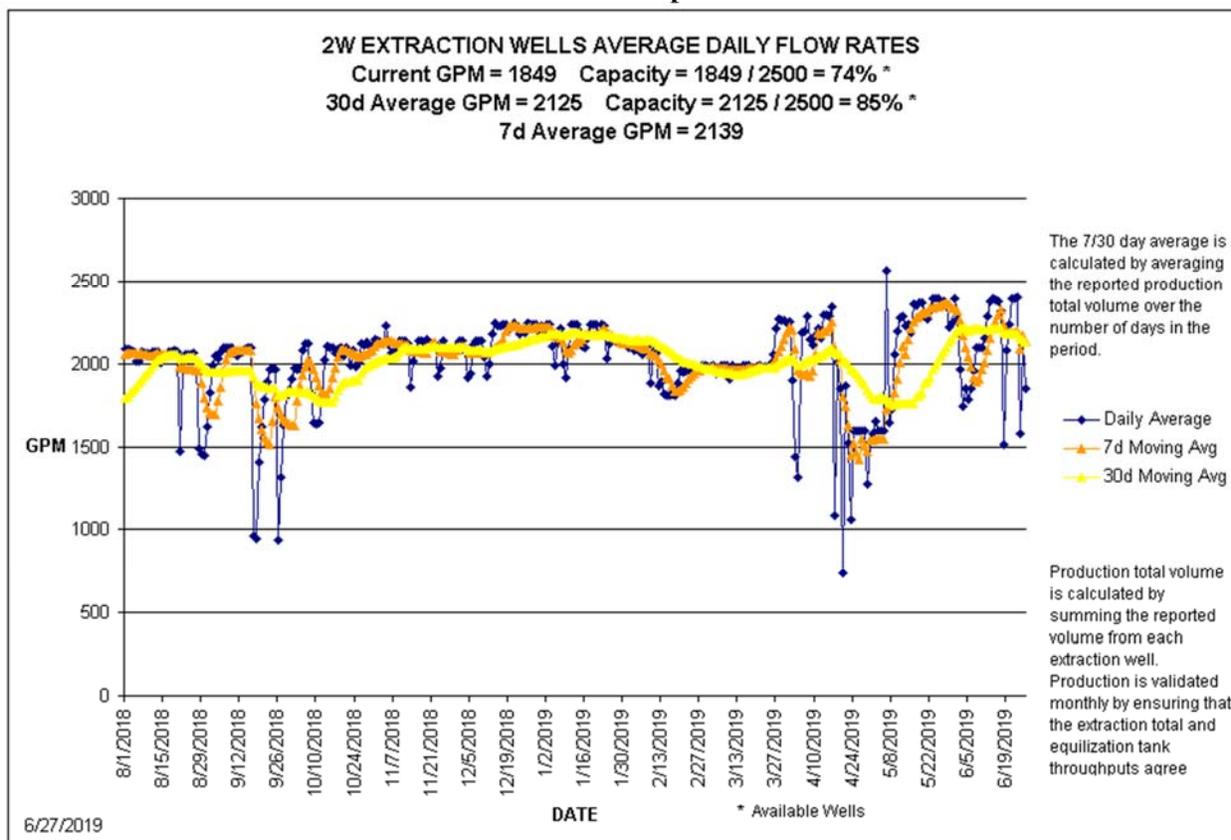
Groundwater P&T Facilities

Overall, the P&T systems operated above the targets as depicted in the P&T performance graphs 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, 100-BC-5 OU Proposed Plan (PP) prior to the initiation of the public comment period. This requirement was not included in the fiscal year (FY) 2019 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 (KPG), *Initiate 100-BC-5 Proposed Plan Public Review*.

Corrective Action:

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

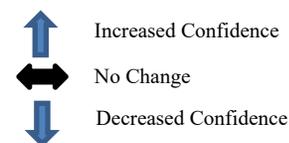
Status:

EPA notified CHPRC that the EPA administrator has delegated approval for the release of the PP to the regional administrator. It was further relayed that the regional administrator has given verbal confirmation to release the PP. As a result, CHPRC will proceed to finalize the document and schedule the public review in late August 2019. Issue closed.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
Explanation of major changes to the project monthly spotlight chart:										
Risk <i>SGW-BC5-06DOE: BC – Regulator Delays Impact KPG</i> has been closed and will be removed from the spotlight chart for the next reporting period.										
Realized Risks (Risks that are currently impacting project cost/schedule)										
No realized risks identified in June.										
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
SGW-BC5-06DOE: BC5 – Regulator Delays Impact KPG	Completion of the PP is delayed because 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.	●	↔	<p>Risk Triggers: EPA HQ review of Draft Revision 0 PP is extended beyond the 75-day review calendar.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mitigation action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: The EPA regional administrator (acting delegate for the HQ administrator) has given verbal confirmation to release the PP. RL is proceeding with finalizing the document. This risk is considered closed and therefore will be removed from the spotlight chart in the next reporting period.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
<p>Risk Handling Strategy: Transfer</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$0K, 180 days</p>										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
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 Triggers: Additional rounds of comments are required to support completion of CERCLA documentation.						
				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mitigation action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">None identified at this time.</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
				Mitigation action(s)	FC Date	%				
None identified at this time.	N/A	N/A								
Mitigation Assessment: No major changes in June . Due to additional review of the 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 FY2019). Once comments are received, this risk may be elevated to the realized risk section.										
FY2019 Risk Triggers (Risk could be realized in FY2019)										
No FY2019 risk triggers identified in June .										
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in June .										

PROJECT BASELINE PERFORMANCE Current Month (CM) (\$M)

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	10.6	9.1	8.8	(1.4)	(13.7%)	0.3	3.4%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (-\$1.4M/-13.7%)

Primary drivers for the negative current period schedule variance include:

- Composite Analysis vadose zone model runs were delayed as a result of in-scope unplanned work encountered in a prior period along with a slow down as the new computing system was installed. The in-scope unplanned work was the result of an updated geoframework and while the computing system was being stood up, the new geoframework data could be updated. Additionally, resources planned to perform the vadose zone modeling have been diverted to the Cumulative Impact Evaluation (CIE) project to support completion of a DOE Key Performance Goal. These delays have resulted in some of the vadose zone activities slipping into FY2020. CIE modeling activities were not initiated on time due to a delay in the procurement process in a prior period. Because of the late start, and in order to accomplish DOE KPG 10, Initiate CIE Modeling, other CIE execution activities (not required for the KPG) have been delayed to allow resources to be diverted to the higher priority activity to complete the KPG, causing a negative schedule variance in the current period.
- The selected subcontractor for the M-24-00 five-well campaign submitted an amended drilling schedule with a later start date than planned (for their convenience), resulting in the delay of subcontractor mobilization and drilling initiation. Although the drilling is forecast to complete within FY2019, the delay has resulted in the borehole summary report being deferred into FY2020.
- Performance on Ground Water Sample Collection was over-stated in a prior period. A reconciliation performed in June identified incorrect performance for some activities. To true-up the error and to date performance, less performance was taken in the current period, resulting in a negative schedule variance.

- The planned procurement of a pump-setting rig has been delayed because of bids requiring a 12-month lead-time for delivery. The rig is now expected to be received in FY2020.

CM Cost Performance (+\$0.3M/+3.4%)

The current period cost variance is within reporting threshold.

Contract-to-Date (CTD)

(\$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	1,612.6	1,608.9	1,551.9	(3.7)	(0.2%)	56.9	3.5%	1,646.7	1,585.6	33.6	61.1

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$3.7M/-0.2%)

The CTD negative schedule variance is within reporting thresholds.

CTD Cost Performance (+\$56.9M/+3.5%)

The CTD positive cost variance is within reporting thresholds.

Variance at Completion (+\$61.1M/+3.7%)

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		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	132.9	114.3	18.6
Incremental Scope Change Pending Change Management	0.0	0.2	(0.2)
RL-0030 - Total	132.9	114.5	18.4

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. Spending forecast value includes cost and fee.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0030 Tri-Party Agreement enforceable Milestones, non-enforceable target due dates, and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/Comment
Milestones at Risk					
M-015-93C	Initiate Characterization Field Work for 200-SW-2 Operable Unit Landfills	9/30/2018		TBD	In Dispute Resolution
M-015-98	Complete Remedial Investigation of U Plant Related Waste Sites located in 200-WA-1	6/30/2019		TBD	In Dispute Resolution
M-085-70	Submit to Ecology a Remedial Investigation/Feasibility Study Work Package for 200-CB-1	9/30/2019		TBD	In Dispute Resolution

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review of 100-NR-2 RI/FS Decisional Draft B	3/4/2019 (A)	6/28/2019
RL Extended Review of Decisional Draft Biomobilization and Biointrusion SAP	3/7/2019 (A)	7/18/2019
RL Review 200-BP-5 GW Monitoring Plan Revision 1 Decisional Draft	4/12/2019 (A)	7/11/2019
RL Review of 100-KR-4 FS Decisional Draft B	5/10/2019 (A)	7/18/2019
RL Review 100-NR-2 Biovent Characterization Cultural Resource Review (CRR)	5/28/2019 (A)	6/24/2019
RL Support to Agency Reviews of CIE Technical Approach Document Draft A	5/30/2019 (A)	8/4/2019
RL Transmit Draft A, Revision 1 200-UP-1 Performance Measurement Plan to Regulators for Review	6/7/2019 (A)	6/24/2019
RL Transmit SST WMA A-AX-Engineering Evaluation Report Revision 0 to Ecology	6/21/2019 (A)	7/8/2019
RL Review 100-NR-2 Biovent Characterization SAP Decisional Draft	6/21/2019 (A)	7/16/2019
RL Submit A-Farm 8C Groundwater Monitoring Plan Regulator Review Draft to Operating Record	6/24/2019	6/24/2019
RL Submit B-Farm 8C Groundwater Monitoring Plan Regulator Review Draft to Ecology	6/24/2019	6/24/2019
RL Transmit 200-UP-1 Cr Remedy Remedial Design Investigation Report Draft Revision 0 to Regulators for Check Review	6/26/2019	7/10/2019
RL Transmit 100-NR-2 Biovent Characterization Revised CRR to State Historic Preservation Officer (SHPO)/Tribes for Review	6/29/2019	7/2/2019
RL Review 100-HR-3 FY20 Drilling SAP Addendum Revision A	7/1/2019	7/15/2019
RL Transmit SST WMA C Engineering Evaluation Report Revision 0 to Ecology	7/1/2019	7/15/2019

Description	CHPRC Delivery Date	Expected RL Due Date
RL Transmit NRDWL/SWL Engineering Evaluation Report Revision 0 to Ecology	7/2/2019	7/11/2019
RL Review 100-KR-4 Waste Management Plan Revision Draft	7/9/2019	7/30/2019
RL Submit 216-A-29 Ditch 8C Groundwater Monitoring Plan Regulator Review Draft to Ecology	7/12/2019	7/12/2019
RL/EPA Approve 100-KR-4 Explanation of Significant Difference Final	7/17/2019	7/23/2019
RL Transmit 100-HR-3 RD/RAWP Draft Revision 0 to Regulators for Review	7/19/2019	7/22/2019
RL Certify New NRDWL Information and Submit EER to Ecology	7/28/2019	8/1/2019
RL Transmit S/SX Groundwater Monitoring Plan Revision 0 to Operating Record	7/30/2019	8/8/2019
RL Transmit Central Plateau Tracer Study SAP Draft Revision 0 to Regulators	8/1/2019	8/7/2019
RL Transmit 216-B-63 Trench -Engineering Evaluation Report Regulatory Review Draft to Ecology for Review	8/1/2019	8/1/2019
RL and Ecology Perform Concurrent Review of NRDWL/SWL Groundwater Monitoring Plan Draft	8/2/2019	8/31/2019
RL Transmit TX/TY Groundwater Monitoring Plan Revision 0 to RL and Operating Record	8/6/2019	8/15/2019
RL Transmit 200-BP-5/PO-1 Proposed Plan Draft A to Regulators for Review	8/7/2019	8/10/2019
RL Review of 100-NR Biovent Characterization Memorandum of Agreement	8/19/2019	8/20/2019
RL and Ecology Perform Concurrent Review of 216-A-29 Ditch Groundwater Monitoring Plan Draft	8/20/2019	9/18/2019
RL Transmit Small Shell Tank Waste Management Area B-BX-BY Engineering Evaluation Report Revision 0 to Ecology	8/20/2019	9/3/2019
RL Transmit NRDWL Groundwater Monitoring Plan Revision 0 to Ecology	8/20/2019	8/28/2019
RL Transmit 200-EA-1-RI/FS Work Plan Draft Revision 0 to Regulators for Final Check	8/20/2019	8/27/2019
RL Transmit 100-NR-2 Biovent Characterization Memorandum of Agreement to SHPO/Tribes	8/26/2019	8/27/2019
RL Transmit C-Farm Groundwater Monitoring Plan Revision 0 to Ecology	8/29/2019	9/7/2019
RL Review 200-UP-1 Remedial Design/ Remedial Action Work Plan Revision II Decisional Draft	8/30/2019	9/28/2019
RL Transmit A-Farm Groundwater Monitoring Plan Revision 0 to Ecology	8/31/2019	9/9/2019
RL/Ecology Review of Combined East-West Groundwater Monitoring Plan Regulator Review Draft	9/4/2019	10/3/2019
RL Sign and Transmit 100-NR-2 Biovent Characterization Memorandum of Agreement to Ecology	9/9/2019	9/10/2019
RL Transmit 200-UP-1 Performance Monitoring Plan Revision 1 to EPA for Approval	9/11/2019	9/17/2019
RL Transmit IDF Groundwater Monitoring Plan Revision 0 to Ecology	9/13/2019	9/17/2019
RL Submit 100-NR-2 Biovent Characterization Final CRR to SHPO/Tribes	9/16/2019	9/18/2019
RL Transmit B-Farm Groundwater Monitoring Plan Revision 0 to Ecology	9/20/2019	9/24/2019
DOE Transmit 200-BP-5 Groundwater Monitoring Plan Rev 1 Draft A to Regulators for review	9/24/2019	10/7/2019
RL Transmit 216-A-29 Ditch Groundwater Monitoring Plan Revision 0 to Ecology	9/24/2019	9/28/2019
RL Transmit 200-BP-5/PO-1 Proposed Plan Draft Rev 0 to Regulator for Approval	9/25/2019	9/27/2019

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

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

Central Plateau Risk Management (CPRM) personnel completed mercury vapor sampling and monitoring throughout the Reduction-Oxidation (REDOX) facility with exception of the main canyon and seventh floor sample gallery. Additionally, workers in REDOX completely removed all combustible waste items from the operating gallery. Asbestos insulation abatement and piping removal of the 200 West steam lines continued with crews eclipsing over 8,000 linear feet of piping removed this fiscal year (FY). With the exception of a “hot pipe,” personnel completed all hazardous material removal and asbestos abatement from the 242-B/BL facility, as well as de-watering and grout filling the 242-BL basin in preparation of demolishing the facility in July. Crews were finalizing demobilization activities from the Plutonium Uranium Extraction Plant (PUREX) Tunnel 2 worksite.

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	100%

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	16	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0040 Accomplishments

CPRM Surveillance and Maintenance

- Completed annual 212-B roll-up door inspection.
- Supported Project Technical Services (PTS) with dust suppression around Tunnel 2 and relocation of equipment from U Plant to PUREX in support of MO-806 electrical upgrades.
- Completed quarterly CX-70, 71, 72 Temporary Storage and Disposal inspection.
- Performed quarterly chemical inspection.
- Performed B Plant entry to investigate white substance.
- Responded to and mitigated a very minor subsidence, or cave-in, likely due to the collapse of a buried 4 inch inactive vitrified clay pipeline at REDOX.
- Closed roll-on/roll-off cans at PUREX that had been previously staged for PUREX Tunnel grouting.
- Completed annual surveillance of 216-Z-9 and 241-Z-361.

PUREX Tunnel 2 Stabilization Project

Project Technical Services Support

- Completed power upgrade for MO-806 and energization for MO-6104 as part of the Tunnel 2 demobilization.
- Completed final change order negotiations with grouting subcontractor.
- Drafted construction completion document for turnover of Tunnel 2 area from PTS to CPRM.

REDOX Canyon Risk Mitigation

- Completed REDOX surveillance walk downs and document updates.
- Removed loose ceiling tiles and fallen debris from 202-S annex areas.
- Continued fixative applications for contamination controls.
- Completed walk downs and commenced work package planning for removal of asbestos in REDOX.
- Commenced ultrasonic testing and non-destructive assay (NDA) field walk downs to plan shots of suspected transuranic piping.
- Revised NDA procedures to allow for use at REDOX.
- Revised transuranic waste handling procedures for use at CPRM and routed for review.
- Received beryllium characterization to enable down posting of the REDOX canyon, crane way platform, crane maintenance platform and south operating gallery.
- Completed manned entry into REDOX north west end of the sample gallery to review water sampling, commence mercury vapor monitoring and fixative applications to begin locking down contamination to the floor.
- Completed removal of heavy waste items from all egress points.
- Completed removal of waste from the operating gallery.
- Completed radio communications hardware installation and testing for 202-S entries.
- Discovered and mitigated subsidence on north side of REDOX.

242-B/BL Demo Preparation

- Completed hazardous material and asbestos removal in 242-B/BL.
- Completed de-watering of the 242-BL basin and shipped solidified waste to the Environmental Restoration Disposal Facility.
- Completed the removal of a highly contaminated pipe in 242-B.
- Initialized mobilization to begin demolishing 242-B/BL in July.

Steam Line Removal

- Completed asbestos insulation abatement of 200 West sections three (crossover 11 run) and five (crossover 16 run).
- Completed demolition phase of REDOX Zone 1 steam lines.

MAJOR ISSUES

Issue

Upon initial entry into the seventh floor of the REDOX silo, vials of mercury were found on a maintenance cart. Within that same time period, monitoring readings above the worker protection “Step Back” value for mercury [based on the personal protection equipment (PPE) in use] was observed at the floor drain of the seventh floor.

Corrective Action

Develop a detailed monitoring plan, including adjustment of the PPE and the use of personal sampling. In addition, develop a plan to remove the vials for future disposition, as well as isolate the floor drain to address the mercury concerns at that location, and perform mercury sampling throughout REDOX. Based upon both direct reading and time-weighted average mercury monitoring on the seventh floor sample gallery, a mercury remediation strategy will need to be developed.

Status

The vials have been placed in secondary containment and the floor drain isolated. Several revised “Step Back” levels have been developed on a graded approach that considered the PPE in use in order to ensure that controls were properly instituted. In mid-June, levels above the “step back” level were detected at the containment tent on the north side of REDOX. Direct readings were taken 6 inches above the ground surface outside the containment tent, with the highest reading being 0.027 mg/m³. Late in June, direct readings were taken around the facility and all readings were non-detectable except two. The detectable readings were taken inside two manhole covers associated with an inactive REDOX sanitary sewer line, one north of the 202-S Building and one south of the 202-S Building.

To date, thirty-two personal samples have been analyzed and only three were above laboratory detection limits, with the highest being 0.0004 mg/m³ 8-hour Time Weighted Average. Moving forward, monitoring will take place in areas where temperature could potentially cause increased mercury vapors. Monitoring will also occur where the workers are and at the boundary during work evolutions. Periodic monitoring will be evaluated in upcoming work areas and corporate reach back will analyze lessons learned.

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 requested designation results of the white residue on the floor of the Canyon Building, 221-B pipe, and operating gallery be submitted within 90 days of receipt of the compliance report.

Corrective Action

RL and CH2M HILL 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 will be revised to support sampling and analysis of the white powder in the event that it is determined as part of item number 2 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 received contracting officer direction to remedy environmental and regulatory documents. RL has indicated that although the May deadline for cleanup was not 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 the 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 loadout continues and a work package is in development for large items requiring size reduction. 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 is being performed as part of determining remediation path alternatives to water intrusion.

Status

A draft structural integrity analysis has been received indicating a 24-foot heavy equipment standoff is required, which will complicate the effort to seal the filter housing. The project continues to track the water level in a catch tank; current water level tracks are consistent with rainfall.

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: No major changes to the stoplight in June.																
Realized Risks (Risks that are currently impacting project cost/schedule)																
REDOX-01: Resource Availability	Higher CHPRC priority work results in reallocation of resources. Improving job markets, resulting 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	●		<p>Risk Event: Other Hanford contractors (OHC) and higher CHPRC priority work has impacted the resource availability for REDOX. OHCs impacted work through the labor asset management program taking skilled and trained decontamination and decommissioning (D&D) workers.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Identify and hire temporary employees (D&D, asbestos workers, Radiological Control Technicians) early in the fiscal year.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Meet with other CHPRC projects in attempts to spread resources appropriately between projects.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Conduct ongoing full time equivalent analyses to ensure staffing is adequate.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Risk Action Assessment: No major changes in June. D&D workers were hired in late January and completed the required training at the HAMMER Federal Training Center in Richland. Currently, the D&D workers are gaining field experience.</p>	Risk Recovery action(s)	FC Date	%	Identify and hire temporary employees (D&D, asbestos workers, Radiological Control Technicians) early in the fiscal year.	Complete	100	Meet with other CHPRC projects in attempts to spread resources appropriately between projects.	Ongoing	N/A	Conduct ongoing full time equivalent analyses to ensure staffing is adequate.	Ongoing	N/A
Risk Recovery action(s)	FC Date	%														
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Meet with other CHPRC projects in attempts to spread resources appropriately between projects.	Ongoing	N/A														
Conduct ongoing full time equivalent analyses to ensure staffing is adequate.	Ongoing	N/A														
REDOX-06: Impacted by OHC (Other Hanford Contractors) or Other CHPRC Projects	Delays by Other Hanford Contractors (OHCs), or other CHPRC projects impacts the schedule and technical approach due to inconsistencies 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	●		<p>Risk Event: Impacts from OHC would impact the ability for work to progress at REDOX due to conflicts with close neighbors (222-S Lab).</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Communication plan and outreach efforts will be developed and executed throughout the project.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Establish north side road parking lot and trailer access to avoid interferences with Mission Support Alliance and Washington River Protection Solutions, LLC (WRPS) work to the south.</td> <td style="text-align: center;">Sept 2019</td> <td style="text-align: center;">35%</td> </tr> </tbody> </table> <p>Risk Action Assessment: No major changes in June. Construction of an access road connecting the north side of REDOX to Beloit Avenue will reduce the interaction between REDOX and 222-S Lab. Additionally, a four-wide trailer is in the process of being procured to move personnel from MO409 to the north side of REDOX, reducing the amount of personnel interacting with 222-S Lab.</p>	Risk Recovery action(s)	FC Date	%	Communication plan and outreach efforts will be developed and executed throughout the project.	Ongoing	N/A	Establish north side road parking lot and trailer access to avoid interferences with Mission Support Alliance and Washington River Protection Solutions, LLC (WRPS) work to the south.	Sept 2019	35%			
Risk Recovery action(s)	FC Date	%														
Communication plan and outreach efforts will be developed and executed throughout the project.	Ongoing	N/A														
Establish north side road parking lot and trailer access to avoid interferences with Mission Support Alliance and Washington River Protection Solutions, LLC (WRPS) work to the south.	Sept 2019	35%														
REDOX-07: Building Accessibility due to Water Intrusion	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	●		<p>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 have not been able to access the west end of the North Sample Gallery.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Spray roof with engineered roofing sealant prior to the rainy season, in an effort to minimize leaks.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Patch existing roof vulnerabilities.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> <p>Risk Action Assessment: No major changes in June. 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 identifications are being worked to address the water in the west end of the North Sample Gallery.</p>	Risk Recovery action(s)	FC Date	%	Spray roof with engineered roofing sealant prior to the rainy season, in an effort to minimize leaks.	Complete	100	Patch existing roof vulnerabilities.	Complete	100			
Risk Recovery action(s)	FC Date	%														
Spray roof with engineered roofing sealant prior to the rainy season, in an effort to minimize leaks.	Complete	100														
Patch existing roof vulnerabilities.	Complete	100														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																		
		Month	Trend																			
RL-0040/WBS-040																						
REDOX-11: Unexpected Discovery - Hazmat	<p>Unexpected or late discovery of hazardous material is discovered during deactivation and decommissioning of 202-S REDOX.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$11K, 48 day</p>	●	↓	<p>Risk Event: During deactivation and decommissioning activities, there is an unexpected discovery of hazardous material.</p> <table border="1"> <thead> <tr> <th>Risk Recovery action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform investigative entries into silo, North Sample Gallery, and canyon.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Characterization in progress.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Innovative methods (i.e., robots) to further understand conditions.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Risk Action Assessment: No major changes in June. Investigative entries and characterizations are furthering the understanding of the current conditions of REDOX.</p>	Risk Recovery action(s)	FC Date	%	Perform investigative entries into silo, North Sample Gallery, and canyon.	Ongoing	N/A	Characterization in progress.	Ongoing	N/A	Innovative methods (i.e., robots) to further understand conditions.	Ongoing	N/A						
Risk Recovery action(s)	FC Date	%																				
Perform investigative entries into silo, North Sample Gallery, and canyon.	Ongoing	N/A																				
Characterization in progress.	Ongoing	N/A																				
Innovative methods (i.e., robots) to further understand conditions.	Ongoing	N/A																				
REDOX-16: Facility Integrity	<p>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.</p> <p>Risk Handling Strategy: Transfer</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$0, 0 day</p>	●	↔	<p>Risk Event: Leaking roof results in unsafe working conditions for personnel.</p> <table border="1"> <thead> <tr> <th>Risk Recovery action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform cold and dark activities to shut off building power.</td> <td>Sept 2019</td> <td>35</td> </tr> <tr> <td>Repair minor roof defects.</td> <td>June 2019</td> <td>50</td> </tr> </tbody> </table> <p>Risk Action Assessment: No major changes in June. 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.</p>	Risk Recovery action(s)	FC Date	%	Perform cold and dark activities to shut off building power.	Sept 2019	35	Repair minor roof defects.	June 2019	50									
Risk Recovery action(s)	FC Date	%																				
Perform cold and dark activities to shut off building power.	Sept 2019	35																				
Repair minor roof defects.	June 2019	50																				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																						
REDOX-05: Collapse of Sand Filter	<p>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.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Very Low (<10%)</p> <p>Worst Case Impacts: \$260K, 48 day</p>	●	↔	<p>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.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Establish project boundary.</td> <td>Sept 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 OHC 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> </tbody> </table> <p>Mitigation Assessment: No major changes in June. The project is working to ensure that the steam line removal efforts consider sand filters while planning. The project continues to communicate 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 is ongoing.</p>	Mitigation Action(s)	FC Date	%	Establish project boundary.	Sept 2019	50%	Use bracing when digging.	Not yet digging	N/A	Implement communication plan between OHC and other CHPRC projects.	Ongoing	NA	Engineering to conduct structural integrity and equipment stand-off evaluations.	Ongoing	NA	Follow the critical lift process, and hoisting and rigging manual.	Ongoing	NA
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Engineering to conduct structural integrity and equipment stand-off evaluations.	Ongoing	NA																				
Follow the critical lift process, and hoisting and rigging manual.	Ongoing	NA																				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																						
No high risk threat value risks in June.																						
FY2019 Risk Triggers (Risk could be realized in FY2019)																						
PRXT-S2-009: Resources Unavailable	<p>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.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%)</p> <p>Worst Case Impacts: \$102K, 64 day</p>	●	↔	<p>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.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Mitigation Assessment: No major changes in June. The project has hired D&D workers in anticipation of another 25 Nuclear Chemical Operators openings at WRPS in the second quarter of FY2019.</p>	Mitigation action(s)	FC Date	%	Conduct full time equivalent personnel analysis and identify corrective actions to ensure adequate resource profiles.	Ongoing	N/A												
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Conduct full time equivalent personnel analysis and identify corrective actions to ensure adequate resource profiles.	Ongoing	N/A																				
Unassigned Risks (Pending ownership of identified risks/opportunities)																						
No unassigned risks identified in June.																						

PROJECT BASELINE PERFORMANCE Current Month (CM) (\$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	3.5	2.9	4.6	(0.6)	-17.7%	(1.7)	-58.7%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance: (-\$0.6M/-17.7%)

The current month negative schedule variance is primarily due to performing the stabilization of PUREX Tunnel 2 well ahead of the baseline schedule dates; therefore, causing a negative variance due to lagging budgeted cost of work scheduled. In addition, the PUREX office trailer installation is behind schedule as the vendor backlog for receipt of the new trailers is approximately three months later than anticipated. The discovery of mercury on the seventh floor of the REDOX silo gallery continues to cause delays as air sampling continues and worker safety documentation is updated to account for the presence of mercury. Finally, the incorporation of industrial hygiene controls allowing the use of additional size reduction tools has slowed progress of combustible removals from the REDOX canyon.

CM Cost Performance: (-\$1.7M/-58.7%)

The current month negative cost variance is partially attributed to incurring change orders for directing the grout contractor to perform additional demobilization activities for PUREX Tunnel 2, including removal of the power drop at the Integrated Disposal Facility, repair of the perimeter fence, and removal and disposal of the conveyances.

The variance is also attributed to performing 242-B/BL D&D work scope that is not currently in the proposed baseline. This project is well ahead of schedule and all scope in the baseline proposed at the start of FY2019 has been performed. This authorized scope, being performed outside of the baseline, is expected to be definitized within the quarter. Once definitized, this scope will be added to the baseline and performance will be claimed.

Finally, the discovery of mercury on the seventh floor of the REDOX silo gallery continues to halt progress as air sampling continues and worker safety documentation is updated to account for the presence of mercury. The incorporation of industrial hygiene controls allowing the use of additional size reduction tools has slowed progress of combustible removals from the REDOX canyon, while additional support has been necessary to update and release the work package.

Contract-To-Date (CTD) (\$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	544.6	538.2	519.5	(6.5)	-1.2%	18.7	3.5%	555.8	540.5	21.0	15.3

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance: (-\$6.5M/-1.2%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$18.7M/+3.5%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (+\$15.3M/+2.8%)

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		Variance
	Projected Funding	Spending Forecast	
RL-0040 Spending Forecast	81.8	75.4	6.4
Incremental Scope Pending Change Management	0.0	1.9	(1.9)
RL-0040 – Total	81.8	77.3	4.5

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 Analysis

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-016-256	Complete Removal of All Waste Sites for FY2019 as Updated/Modified in M-16-17-01.	9/30/2019		TBD	In dispute resolution. In negotiation with RL to adjust schedule to FY2020.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review 224-B (B Plant) Removal Action Work Plan (2017-34)	8/16/2017 (A)	7/30/2019
202-A PUREX (2016-15) Draft B Engineering Evaluation/Cost Analysis Public Review	12/11/2017 (A)	8/30/2019

Section F

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

CH2MHILL
Plateau Remediation Company



R. M. Geimer
Vice President for
K Basin Operations

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

M. A. Wright
Vice President for
Project Technical Services

PROJECT SUMMARY

K Basin Operations (KBO):

Soil Remediation and Waste Site Closure completed the draft of the excavation contract statement of work (SOW) for fiscal year (FY) 2020 and FY2021 scope and provided the SOW to the CHPRC Supply Train Group. The team initiated removal and stockpiling overburden from Waste Site 100-K-47:2. The K West Basin Deactivation group completed basin wall surveys at the waterline supporting characterization of the wall source term. The K West Basin Deactivation group also completed Attila 3-G model training for radiological engineers and designers, increasing the contingent of local resources capable of supporting the K West Basin characterization effort. The D&D group demolished Buildings 1724K, 1724KA and Building 167K, and are continuing to loadout the debris from the sites. In the K East Reactor Interim Safe Storage (ISS) group, the contractor completed development of the 90 percent Safe Storage Enclosure (SSE) design modification package and submitted it to CHPRC for review. The group received final approvals on the asbestos removal mobilization work package and completed development of the subcontractor asbestos work plan, an input to the asbestos removal work package.

River Risk Management Project (RRMP):

Maintenance and repairs completed this period include: repair of the 40-ton chiller on the 324 heating, ventilation, and air conditioning (HVAC) system, installation of lighting in the truck lock, completion of reduced ventilation testing, and the completion of maintenance on the C Cell crane. In the airlock, all cell sealing was completed and the airlock track system was installed. The first three bins of B Cell waste were loaded into a 9-by-5-by-5 waste box, along with a used roughing filter from C Cell, and removed via the track system. The waste box is staged for shipping to the Environmental Restoration Disposal Facility. Larger 44-inch waste bins were loaded into B Cell and the remote excavator arm (REA) continues waste loading. Conditioning of the B Cell gallery wall was completed in support of the installation of the final REA through support. The project completed geoprobe removal from under B Cell to allow micropile installation, grout injection, and soil excavation inside B Cell. Drilling on the first of four pilot holes was completed to support the validation of installing structurally supporting micropiles in the basement of 324. CHPRC's review of the micropile design was completed and comments returned to the vendor.

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 FY2019 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	90%
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	72%

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	2	27	6/3/2019 – Employee was next to a coworker as they untaped a glove. The glove ripped and snapped, flinging droplets of fluid and dirt. A small amount of fluid splashed past their safety glasses and into the employee’s eye. The eye was rinsed with a bottle of saline solution and the employee was evaluated at HPM Corporation (HPMC) and released back to work without restriction. (25187) 6/17/2019 – Employee experienced a bug bite on the right hand. Employee was evaluated at HPMC and released back to work without restriction. (25201)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

K Basin Operations

- 100K Closure Project:
 - o Soil Remediation and Waste Site Closure completed the draft of the excavation contract SOW for FY2020 and FY2021 scope and provided the SOW to the CHPRC Supply Chain Group.
 - o K West Basin Deactivation
 - Completed basin wall surveys at the waterline supporting characterization of the wall source term.
 - Completed Attila 3-G model training for radiological engineers and designers, increasing the contingent of local resources capable of supporting the K West Basin characterization effort.
 - o Ancillary Facility D&D
 - Demolished Buildings 1724K, 1724KA, and 167.
 - o K East Reactor ISS
 - Architecture engineering contractor completed development of the 90 percent SSE design modification package and submitted it to CHPRC for review.
 - Received final approvals on the asbestos removal mobilization work package.
 - Completed development of the subcontractor asbestos work plan, an input to the asbestos removal work package.

River Risk Management Project, 324 Building Disposition Project

- Remote soil excavation operations readiness assessment continued readiness self-assessment in preparation for the checklist readiness assessment beginning in July.
- Equipment Procurement and Fabrication:
 - o Awarded the B Cell 10T crane contract.
 - o Completed design of shielded cradle supporting 324 waste loadout.

- o Completed factory acceptance tests on the modified transfer mechanism.
- o Received collimated detector/shielded probe.
- o Received 15 large waste bins; 12 delivered at 324 and three at the mockup.
- o Received two rad assay tables.
- o Continued the 324 systems design and fabrication of the waste box shielding/waste bins/waste containers, cell dams, transfer mechanism modifications, and miscellaneous items for the REAs.
- Facility Preparations:
 - o Repaired 40-ton chiller HVAC system in the 324 Building.
 - o Completed geoprobe removal under B Cell to allow future micropile installation, soil stabilization, and soil excavation.
 - o Completed maintenance on C Cell crane.
 - o Installed temporary lighting in the truck lock.
 - o Removed diverter flange and piping in Room 18 to support future structural modifications.
 - o Initiated wall scarification using scabbling device in NE REA location in the B Cell Gallery.
 - o Continued demobilization of Pit 6.
 - o Completed C Cell window sealing.
 - o Continued external cell sealing.
 - o Completed airlock internal cell sealing.
 - o Completed Incident Command Post limited scope drill.
- Structural Modifications:
 - o Completed the first pilot hole in Room 18.
 - o Drilled to approximately 4 feet on the second pilot hole in Room 18.
 - o Returned CHPRC comments on the micropile final design to the vendor.
- Mockup:
 - o Continued floor saw operational testing.
 - o Continued operator proficiency training.
 - o Initiated REA hammer floor removal operational testing.
- Cell Cleanout:
 - o Continued B Cell debris size reduction and waste bin loadout.
 - o Installed airlock track system and loaded the first waste box with B Cell debris waste bins and removed it from the facility.
- Tours:
 - o Hosted a tour for a DOE Headquarter's Technology Development.
 - o Hosted a tour for DOE interns.
 - o Hosted a tour for DOE under secretary for science and staff.

Project Technical Support

- Operations Program:
 - o Conducted Controlling Organization Administrator qualification interview in support of lockout/tagout program implementation.
 - o Participated in Readiness Review Board meetings in support of B324 Remote Soil Excavation readiness preparations.
- Readiness and Preparedness conducted 324 Limited Scope Drill testing the Building Emergency Director and Incident Command Post Communicator proficiency at dealing with an aircraft crash into Building 324. The results of the drill reestablished proficiency for the evaluated Facility Emergency Response Organization members.

MAJOR ISSUES

Issue

A shortage of radiological control technicians (RCTs), radiation control engineers, radiation control work planners, and radiation control first line managers has hampered 100K Closure Project soil remediation and basin deactivation 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 hired and assigned is sufficient to perform planned Soil Remediation and K East Reactor asbestos removal work for the remainder of FY2019. Following a meeting with KBO management, RADCON, Contract Services and Labor Relations have initiated an extraordinary effort to hire RCTs to support 100K Operations and 100-K Deactivation, which should resolve the issue in FY2019.

Issue

The project is ready to award the vertical pipe casing (VPC) fabrication contract as authorized in the revised FY2019 Plan. RL has an informal hold on the contract.

Corrective Action

The project will deliver a briefing to the RL assistant manager for River and Plateau, director for Project and Facilities Division, in July, regarding the efficacy of using the VPC system through execution of the K West Basin deactivation and demolition strategy as presented in the FY2020 Post Contract Baseline.

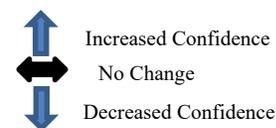
Status

The proposed FY2020 deactivation schedule is undergoing a day-for-day slip with the decision on the VPCs. Waiting for RL to release the informal hold on issuing the VPC fabrication contract or to provide formal contract direction.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments																					
		Month	Trend																						
RL-0041/WBS-041																									
Explanation of major changes to the project monthly spotlight chart: Risk <i>RCC-300-296-01: Latent Conditions Impact Facility Modification</i> was moved from the <i>Realized</i> risk section to the <i>FY2019 Risk Trigger</i> section of the spotlight chart.																									
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 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	●	↔	<p>Risk Event: In March, unexpected contamination was found within Room 18 during pilot hole drilling activities.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Recovery Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>As low as reasonably achievable (ALARA) review (IPAR) evaluations</td> <td style="text-align: center;">5/13/2019</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Incorporate increased personnel contamination monitor (PCM) usage and surveys to personnel exiting controlled areas.</td> <td style="text-align: center;">7/10/2019</td> <td style="text-align: center;">Ongoing</td> </tr> </tbody> </table> <p>Recovery Assessment: ALARA review evaluations for process improvements were completed in May. However, fieldwork was placed on hold as radiological controls and thorough surveys were being enhanced to verify personnel exiting controlled areas. Monitoring of this risk will continue as additional controls are being incorporated to reduce the likelihood of occurrence.</p>	Recovery Action(s)	FC Date	%	As low as reasonably achievable (ALARA) review (IPAR) evaluations	5/13/2019	100	Incorporate increased personnel contamination monitor (PCM) usage and surveys to personnel exiting controlled areas.	7/10/2019	Ongoing												
Recovery Action(s)	FC Date	%																							
As low as reasonably achievable (ALARA) review (IPAR) evaluations	5/13/2019	100																							
Incorporate increased personnel contamination monitor (PCM) usage and surveys to personnel exiting controlled areas.	7/10/2019	Ongoing																							
RCC-300-296-30: 300-296 Design Changes Result in Increased Subcontractor Change Order(s) / Claims	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	●	↔	<p>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.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Recovery Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Contractor prepare and submit structure modification design - 30 percent to 60 percent (VE2810)</td> <td style="text-align: center;">8/15/2018</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Perform micropile demonstration and verification to support structural modification design (VS1220A)</td> <td style="text-align: center;">1/24/2019</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Structural modifications design micro-pile comment resolution (VS1220C)</td> <td style="text-align: center;">5/13/2019</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Perform pilot holing for structural mods (VS5010)</td> <td style="text-align: center;">7/11/2019</td> <td style="text-align: center;">55</td> </tr> <tr> <td>Perform Pit 6 soil verification testing / geotech (VS1220B)</td> <td style="text-align: center;">8/12/2019</td> <td style="text-align: center;">99</td> </tr> <tr> <td>Contractor prepare and submit structural modification design (VN1220)</td> <td style="text-align: center;">8/22/2019</td> <td style="text-align: center;">87</td> </tr> </tbody> </table> <p>Recovery Assessment: Delays for completing the final structural design have been incurred due to the realization of risks RCC-300-296-31: <i>Contamination Encountered During Assumption Verification</i> and recently, RCC-300-296-01: <i>Latent Conditions Impact Facility Modification</i>. The realization of these risks halted fieldwork activities supporting the completion of the final design. However, fieldwork resumed on May 13, 2019, and is progressing toward completion.</p>	Recovery Action(s)	FC Date	%	Contractor prepare and submit structure modification design - 30 percent to 60 percent (VE2810)	8/15/2018	100	Perform micropile demonstration and verification to support structural modification design (VS1220A)	1/24/2019	100	Structural modifications design micro-pile comment resolution (VS1220C)	5/13/2019	100	Perform pilot holing for structural mods (VS5010)	7/11/2019	55	Perform Pit 6 soil verification testing / geotech (VS1220B)	8/12/2019	99	Contractor prepare and submit structural modification design (VN1220)	8/22/2019	87
Recovery Action(s)	FC Date	%																							
Contractor prepare and submit structure modification design - 30 percent to 60 percent (VE2810)	8/15/2018	100																							
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0041/WBS-041																
RCC-300-296-03: Mockup Testing and Qualification of Remote Equipment / Process Identifies Major Modification Requirements	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			<p>Risk Event: During vendor factory acceptance test and/or mockup, testing, issues and conditions were identified with mockup equipment, resulting in additional re-design, 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).</p> <table border="1"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Install radiological assay system and perform CAT at the mockup</td> <td>3/14/2019</td> <td>100</td> </tr> <tr> <td>Install floor saw and support system at the mockup (VN1020)</td> <td>4/23/2019</td> <td>100</td> </tr> <tr> <td>Conduct proficiency training at the mockup (VN1700)</td> <td>9/11/2019</td> <td>40</td> </tr> </tbody> </table> <p>Recovery Assessment: Integration with remotely operated equipment through testing and training at the mockup will continue with preparations for 324 Building equipment. During testing and proficiency training of the floor saw, the project experienced failure of essential components. CHPRC exercised the contract option to have the vendor perform an onsite inspection of the components. Failed components were shipped to the vendor for repairs and receipt of components for continued use is expected in the upcoming period. Impacts continue to be incorporated into the project schedule, along with the estimate to complete, to reflect further impacts of risk being realized.</p>	Recovery Action(s)	FC Date	%	Install radiological assay system and perform CAT at the mockup	3/14/2019	100	Install floor saw and support system at the mockup (VN1020)	4/23/2019	100	Conduct proficiency training at the mockup (VN1700)	9/11/2019	40
Recovery Action(s)	FC Date	%														
Install radiological assay system and perform CAT at the mockup	3/14/2019	100														
Install floor saw and support system at the mockup (VN1020)	4/23/2019	100														
Conduct proficiency training at the mockup (VN1700)	9/11/2019	40														
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																
No critical risks identified in June.																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
RCC-300-296-07: 300-296 Failure of a REC Cranes (B Cell, A Cell, A-D and Airlock, or CHA cranes)	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			<p>Risk Trigger Metric: Radiochemical Engineering Cells (REC) crane failure occurs during operations.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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>6/20/2019</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: Request for proposals (RFP) were issued in April. The project received estimates and feedback from potential vendors in May. On June 20, 2019, a contract was awarded for fabrication of the B Cell crane. Kickoff meetings were held with the vendor and work scope was initiated. These efforts are expected to reduce the potential for impacts and mitigate significant impacts to the project in the event of risk being realized.</p>	Mitigation Action(s)	FC Date	%	Determine B Cell replacement crane options	3/19/2019	100	Award contract – B-Cell 10T crane – 324	6/20/2019	100			
Mitigation Action(s)	FC Date	%														
Determine B Cell replacement crane options	3/19/2019	100														
Award contract – B-Cell 10T crane – 324	6/20/2019	100														
RCC-300-296-15: 300-296 Cell sealing, interference removal and /or core drilling takes longer than planned	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			<p>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.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform Core Drilling and Shield Plug Installation (VN1200)</td> <td>3/28/2019</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in June. A majority of core drilling interferences have been identified as the project progresses with drilling necessary at the 324 Building in advance of installing soil remediation equipment. The remainder of the known core drilling efforts were completed in the period. However, due to the uniqueness involved with work scope, there exists the potential for unexpected delays and additional core drilling efforts.</p>	Mitigation Action(s)	FC Date	%	Perform Core Drilling and Shield Plug Installation (VN1200)	3/28/2019	100						
Mitigation Action(s)	FC Date	%														
Perform Core Drilling and Shield Plug Installation (VN1200)	3/28/2019	100														
RCC-300-296-08: 300-296 Failure of Cell Shield Door	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			<p>Risk Trigger Metric: During operations of cleanout activities, a cell shield door inoperable.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Preventative maintenance activities are being conducted</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in June. To assure REC shield doors maintain operability, an engineering evaluation was conducted, resulting in the implementation of monthly PMs and the procurement of spare parts.</p>	Mitigation Action(s)	FC Date	%	Preventative maintenance activities are being conducted	Ongoing	N/A						
Mitigation Action(s)	FC Date	%														
Preventative maintenance activities are being conducted	Ongoing	N/A														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0041/WBS-041										
FY2019 Risk Triggers (Risk could be realized in FY2019)										
100K-KWB-102: KW Basin – Resources Unavailable	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	●	↔	<p>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.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Mitigation Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Work with RADCON to ensure KW Basin has sufficient RCTs to support remaining FY19 scope.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: The number of RCTs hired and assigned is sufficient to perform planned soil remediation and K East Reactor asbestos removal work for the remainder of FY2019. Following a meeting with KBO management RADCON in May, Contract Services and Labor Relations have initiated an extraordinary effort to hire RCTs to support 100K Operations and 100-K Deactivation.</p>	Mitigation Action(s)	FC Date	%	Work with RADCON to ensure KW Basin has sufficient RCTs to support remaining FY19 scope.	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
Work with RADCON to ensure KW Basin has sufficient RCTs to support remaining FY19 scope.	Ongoing	N/A								
RCC-300-296-01: Latent Conditions Impact Facility Modification.	Latent conditions, poor visibility in REC cells, or drawing omissions, inconsistencies, or errors impact facility modifications (e.g. mechanical, electrical Industrial Hygiene/radiological control 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	●	↔	<p>Risk Event: On March 28, unexpected beta-gamma contamination was detected while performing clearance surveys at the 324 step-off pad. Following sampling, it was determined to be beta contamination (suspected strontium-90), without a corresponding gamma component.</p> <p>Recovery Assessment: Follow-up contamination surveys were performed throughout the front side areas of the 324 Building using strontium controls (developed for Room 18) with no contamination detected. Work scope within the 324 Building resumed on May 13, 2019. Based on the historical discovery of an elevated latent contamination level (NOC, CHPRC-1801178); this risk will continuously be monitored as routine preventative maintenance activities are in place to reduce the likelihood of occurrence.</p>						
Unassigned Risks (Pending ownership of identified risks/opportunities)										
RCC-300-296-04DOE: 300-296 Seismic Event (Force Majeure)	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 spotlight chart.									
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 spotlight 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 spotlight chart.									

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$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	9.1	8.9	9.3	(0.2)	-2.5%	(0.4)	-5.1 %

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$0.2M/-2.5%)

The CM schedule variance is within reporting thresholds.

CM Cost Performance (-\$0.4M/-5.1%)

The CM cost variance is within reporting thresholds.

Contract-to-Date (CTD)

(\$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	662.2	649.1	615.2	(13.2)	-2.0%	33.9	5.2%	696.9	660.0	44.8	37.0

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (-\$13.2M/-2.0%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance (+\$33.9M/+5.2%)

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. Offsetting the positive cost variance, the 324 Building Disposition Project experienced increased costs for subcontractor development of the design phases for structural modifications. Additional design requirements were placed on the subcontractor that were not originally part of their scope of work. These additional requirements included more extensive building modeling, soil stabilization, building foundation verifications, and testing demonstrations; all of which have contributed to the cumulative cost variance. In addition, there were greater-than-planned labor support by RCTs. Additional support and oversight is required because of the alpha contamination latent condition discovered at the 324 Building.

Variance at Completion (+\$37M/+5.3%)

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 greater-than-planned labor support by Health Physics Technicians (HPTs). Additional support and oversight is required as a result of the Alpha contamination latent condition discovered at the 324 Building. The number of HPTs required to support REC cleanout and facility modifications was underestimated. In addition, increased project management and support staff to accelerate work scope, as well as performing initial structural modifications contributed to the variance. Lastly, a number of unplanned spare parts, acquisitions, and various materials were purchased and/or planned to be acquired in the current fiscal year. As work scope has progressed and evolved, acquisitions were accelerated in order to achieve alternate field work scope.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	FY2019		Variance
	Projected Funding	Spending Forecast	
RL-0041 Spending Forecast	148.3	129.5	18.9
Incremental Scope Change Pending Change Management	0.0	0.5	(0.5)
RL-0041 – Total	148.3	130.0	18.3

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2019 projected funding for project breakdown structure (PBS) RL-0041 is \$148.3 million. The projected funding includes carryover from FY2018 and new budget authority. FY2019 funding aligns with the RL Integrated Priority List.

Critical Path Analysis

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	Forecast Date	Status/ Comment
M-016-85A	Complete Remote Excavation of 300-296 Waste Site	9/30/2021	4/23/2021	On schedule. Due date extended per Change Control M-16-19-01 signed 6/22/2019.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Prepare Documented Safety Analysis (DSA)/Technical Safety Requirement (TSR) Revision Safety Evaluation Report (SER)	5/17/2019(A)	7/10/2019
Safety Review Board Review SER for DSA/TSR Revision	7/19/2019	7/25/2019
RL Issue SER for 324 DSA/TSR	7/26/2019	8/1/2019
RL Review Emergency Planning Hazards Assessment (EPA) Draft	8/1/2019	8/15/2019
RL Approval EPA Final	9/4/2019	9/18/2019
DOE Independent Design Review – Issue for Construction (IFC) Structural Modification	9/5/2019	9/25/2019

Section G

Fast Flux Test Facility Closure (RL-0042)

CH2MHILL
Plateau Remediation Company



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

June 2019
CHPRC-2019-06, 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

- Completed functional review of the statement of work to contract a dive team to perform inspections inside T-58 and T-87 water storage tanks.
- Received determination from labor relations confirming new plant forces work review for performing the tank dive inspections is not required, based on previous Hanford Atomic Metals Trade Council turndown of the same work.
- Finished development of the draft acceptance test plan (ATP) for the P-16 pump variable frequency drive replacement and started design authority review.
- Started engineering review of Work Change Notice-3 to the P-16 pump variable frequency drive installation work package that was updated with information obtained from a team Work Planning Meeting.
- Incorporated electrical engineering design authority comments into the ATP for the C-670 fire pump controller.
- Continued evaluating options for replacing the P-28 diesel generator pump, repurposing an unused water storage tank and use of Buildings 481/481A to support the 400 Area water distribution system.

MAJOR ISSUES

Issue

Initiated development of an engineering change request 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 the U.S. Department of Energy, Richland Operations Office.

RISK MANAGEMENT STATUS

None currently identified.

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$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	0.0%	0.0	11.7%

Numbers are rounded to the nearest \$0.1M

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

The schedule variance is within reporting thresholds.

CM Cost Performance: (+\$0.0M/+11.7%)

The cost variance is within reporting thresholds.

Contract-to-Date (CTD) (\$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	27.7	27.7	23.3	0.0	0.0%	4.4	15.9%	28.1	24.1	0.8	4.0

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/+15.9%)

The CTD favorable cost variance is due to reduction in surveillance and maintenance requirements at FFTF as the facility was deactivated. Efficient use of resources to support deactivation activities within available time further aided this favorable cost variance.

Variance at Completion (+\$4.0M/+14.3%)

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)

RL-0042 FFTF Closure	FY2019		Variance
	Projected Funding	Spending Forecast	
RL-0042 Spending Forecast	4.3	2.3	2.0

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 \$2.3 million, which includes support due to electrical component failures and configuration challenges, interest by regulators requiring additional inspections, and a recent failure of the water system/water piping.

Critical Path Analysis

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



June 2019
CHPRC-2019-06, 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 / 05 / 27										
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23										
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> X <input type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18												
5. CONTRACT DATA																
a. QUANTITY 1	b. NEGOTIATED COST 5,778,403	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 575,567	d. TARGET PROFIT/FEE 254,770	e. TARGET PRICE 6,033,173	f. ESTIMATED PRICE 6,479,559	g. CONTRACT CEILING 6,033,173	h. ESTIMATED CONTRACT CEILING 6,479,559	i. DATE OF OTB/OTS (YYYYMMDD)								
6. ESTIMATED COST AT COMPLETION				7. AUTHORIZED CONTRACTOR REPRESENTATIVE												
MANAGEMENT ESTIMATE AT COMPLETION (1)		CONTRACT BUDGET BASE (2)		VARIANCE (3)		a. NAME (Last, First, Middle Initial) Underwood, Teresa		b. TITLE Prime Contract Compliance Manager								
a. BEST CASE 6,161,510						c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)								
b. WORST CASE 6,233,510																
c. MOST LIKELY 6,224,788		6,353,970		129,181												
8. PERFORMANCE DATA																
CAPN.PBS ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
WORK SCHEDULED (2)	WORK PERFORMED (3)	SCHEDULE (5)		COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	SCHEDULE (10)		COST (11)							
RL-0011 Nuclear Mat Stab & Disp PFP	6,039	2,102	4,887	-3,938	-2,786	1,101,035	1,087,831	1,186,136	-13,204	-98,305	0	0	0	1,122,883	1,228,787	-105,904
RL-0012 SNF Stabilization & Disp	1,376	1,635	1,514	259	120	756,160	755,551	725,820	-610	29,731	0	0	0	761,100	730,247	30,853
RL-0013 Solid Waste Stab & Disp	12,868	11,924	10,567	-944	1,358	1,443,054	1,439,694	1,348,853	-3,361	90,841	0	0	0	1,485,621	1,392,381	93,241
RL-0030 Soil & Water Rem-Grndwtr/Vadose	10,546	9,106	8,798	-1,440	308	1,612,606	1,608,888	1,551,949	-3,718	56,939	0	0	0	1,646,654	1,585,557	61,097
RL-0040 Nuc Fac D&D - Remainder Hanfrd	3,536	2,909	4,615	-627	-1,706	544,636	538,183	519,509	-6,453	18,674	0	0	0	555,821	540,484	15,337
RL-0041 Nuc Fac D&D - RC Closure Proj	9,080	8,856	9,305	-224	-449	662,248	649,061	615,187	-13,187	33,874	0	0	0	696,927	659,952	36,975
RL-0042 Nuc Fac D&D - FFTF Proj	131	131	116	0	15	27,667	27,667	23,263	0	4,404	0	0	0	28,137	24,104	4,034
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET																
e. SUBTOTAL	43,576	36,663	39,803	-6,914	-3,140	6,147,406	6,106,874	5,970,716	-40,532	136,158	0	0	0	6,297,144	6,161,510	135,633
f. MANAGEMENT RESERVE														63,278		
g. TOTAL	43,576	36,663	39,803	-6,914	-3,140	6,147,406	6,106,874	5,970,716	-40,532	136,158	0	0	0	6,360,422	6,161,510	198,911
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																
a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE																

*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 \$ OMB No. 0704-0188

FORM APPROVED

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 / 05 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE						REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)								
34 - Env Program & Strategic Plng	1,039	730	951	-309	-222	95,146	94,073	87,686	-1,073	6,387	0	0	0	98,812	92,126	6,686		
35 - Business Services	0	0	0	0	0	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	124	124	73	0	51	8,869	8,869	5,347	0	3,522	0	0	0	9,314	5,685	3,630		
3B - PFP Closure Project	6,039	2,102	4,887	-3,938	-2,786	1,012,395	999,192	1,105,071	-13,204	-105,880	0	0	0	1,034,244	1,147,722	-113,479		
3C - Waste & Fuels Management Project	9,932	8,590	8,538	-1,342	53	1,281,205	1,277,604	1,190,949	-3,601	86,655	0	0	0	1,314,083	1,224,415	89,668		
3D - Soil & Groundwater Remediation	9,476	8,345	7,828	-1,131	517	1,415,668	1,413,023	1,356,637	-2,645	56,386	0	0	0	1,445,938	1,385,721	60,218		
3G - K Basin Oper & Plateau Remediation Project	5,845	6,062	5,960	217	102	1,091,778	1,086,851	1,025,377	-4,927	61,474	0	0	0	1,113,927	1,050,936	62,990		
3H - River Risk Management Project	7,486	7,701	6,855	216	847	280,788	272,159	282,360	-8,630	-10,201	0	0	0	307,725	315,886	-8,161		
3K - Central Plateau Risk Reduction	3,636	3,009	4,710	-627	-1,701	483,567	477,114	463,200	-6,453	13,914	0	0	0	495,111	484,931	10,180		
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
d. UNDISTRIBUTED BUDGET																		
e. SUBTOTAL (Performance Measurement Baseline)	43,576	36,663	39,803	-6,914	-3,140	6,147,406	6,106,874	5,970,716	-40,532	136,158	0	0	0	6,297,144	6,161,510	135,633		
f. MANAGEMENT RESERVE														63,278				
g. TOTAL	43,576	36,663	39,803	-6,914	-3,140	6,147,406	6,106,874	5,970,716	-40,532	136,158	0	0	0	6,360,422				

CONTRACT PERFORMANCE REPORT																	Form Approved			
FORMAT 3 - BASELINE										DOLLARS IN THOUSANDS							OMB No. 0704-0188			
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			2. CONTRACT FORMAT 3 - BASELINE 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: 2019/05/27 b. TO: 2019/06/23							
5. CONTRACT DATA			a. ORIGINAL NEGOTIATED COST 4,312,366		b. NEGOTIATED CONTRACT CHANGE \$1,466,037		c. CURRENT NEGOTIATED COST (A + B) \$5,778,403		d. ESTIMATED COST AUTH UNPRICED WORK \$575,567		e. CONTRACT BUDGET BASE (C + D) \$6,353,970		f. TOTAL ALLOCATED BUDGET \$6,360,422		g. DIFFERENCE (E - F) (\$6,452)					
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2019		k. CONT COMPLETION DATE 9/30/2019				l. EST COMPLETION DATE 9/30/2019									
6. PERFORMANCE DATA																				
ITEM (1)			BCWS CUM TO DATE (2)		BCWS FOR REPORT PERIOD (3)		SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)						UNDISTRIB BUDGET (18)	TOTAL BUDGET (19)
							+1 Jul-19 (4)	+2 Aug-19 (5)	+3 Sep-19 (6)	+4 Oct-19 (7)	+5 Nov-19 (8)	+6 Dec-19 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)		
a. PM BASELINE (BEGIN OF PERIOD)			6,103,830	42,583	38,335	52,390	48,274	4,260	3,005	53	3,391,477	391,653	471,323	504,826	485,028	470,649	570,457	7,319	0	6,292,731
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																				
BCR-013-19-008R0 - Change to FY2019 IDF Design Estimate																				
BCR-030-19-008R0 - Incorporate Additional FY2019 Work Authorization RL-0030																				
BCR-040-19-004R0 - Initiate Planning for the stabilization of 216-Z-9, 241-Z-36																				
BCR-041-19-009R0 - 100K PCM Replacements and STSC Purchase																				
BCRA-PRC-19-016R0 - HPIC Updates June FY2019																				
c. PM BASELINE (END OF PERIOD)			6,147,407	43,576	39,567	53,750	49,101	4,260	3,005	53	3,391,477	391,653	471,323	504,826	485,028	470,649	574,870	7,319	0	6,297,144
7. MANAGEMENT RESERVE																				63,278
8. TOTAL																				6,360,422

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 / 05 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group	ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD (Cumulative)	FORECAST (Non-Cumulative)												AT COMPLETION	
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS							
			+1 JUL 2019	+2 AUG 2019	+3 SEPT 2019	+4 OCT 2019	+5 NOV 2019	+6 DEC 2019	JAN 2020	FEB 2020	MAR 2020	APR 2020	ATCOMPLETE			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)		
300 - Office of the President	17	880	7	7	7	7	0	0	0	0	0	0	0	0	0	900
303 - Internal Audit	5	579	6	6	6	6	0	0	0	0	0	0	0	0	0	596
304 - General Counsel	4	534	4	4	4	4	0	0	0	0	0	0	0	0	0	547
31 - Communications	8	1186	9	9	9	8	0	0	0	0	0	0	0	0	0	1213
32 - Safety Health Security & Quality	52	8281	55	56	56	56	0	0	0	0	0	0	0	0	0	8448
34 - Env Program & Strategic Plng	44	5674	46	44	40	40	1	0	0	0	0	0	0	0	0	5806
35 - Business Services	56	7896	57	60	61	61	0	0	0	0	0	0	0	0	0	8074
36 - Prime Contract & Proj Integr	38	4260	40	40	40	40	0	0	0	0	0	0	0	0	0	4378
37 - Resource Mgmt & Strategic Intg	40	3194	43	44	44	44	0	0	0	0	0	0	0	0	0	3325
38 - Project Technical Services	34	6307	36	35	35	35	0	0	0	0	0	0	0	0	0	6413
3B - PFP Closure Project	200	53089	208	208	208	190	207	207	209	104	11	0	0	0	0	54641
3C - Waste & Fuels Management Project	375	57066	385	390	386	386	2	2	3	6	2	2	1	0	0	58246
3D - Soil & Groundwater Remediation	259	41906	267	263	246	19	9	8	8	6	6	1	17	0	0	42755
3G - K Basin Oper & Plateau Remediation Project	237	36040	246	241	234	24	25	25	15	13	21	1	1	1	1	36885
3H - River Risk Management Project	223	8197	229	227	230	3	1	0	0	0	0	0	0	1	0	8889
3K - Central Plateau Risk Reduction	213	19305	178	199	198	21	6	6	0	0	0	0	0	0	0	19913
g. TOTAL DIRECT	1804	254394	1816	1833	1801	261	250	249	238	125	40	3	19	19	261029	

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) 2019/05/27			
b. LOCATION (Address and ZIP Code) Richland, WA 99354		b. NUMBER DE-AC06-08RL14788		b. PHASE Base		b. TO (YYYY/MM/DD) 2019/06/23			
		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:	43,576	36,663	39,803	(6,914)	-15.9%	(3,140)	-8.6%	0.84	0.92
Cumulative:	6,147,406	6,106,874	5,970,716	(40,533)	-0.7%	136,158	2.2%	0.99	1.02
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	6,297,144	6,161,510	135,633	2.2%	1.00				
Explanation of Variance/Description of Problem:									
<p>Current Period Schedule and Cost Variance: The current month negative schedule variance (SV) is primarily due to project breakdown structure (PBS) RL-0011 schedule slip of 10 working days due to wind impacts and a deliberate rate of demolition. The PFP team completed stairwells 1 and 2 but did not complete Zones 3, 4.1, and 7 as well as tunnels 1, 2, 3, and 6. The variance is also an artifact of the baseline change request (BCR) in April to incorporate the impact of stop works, demolition and decontamination (D&D) Labor Asset Management Program (LAMP) movement, and unexpected winter weather, which added a hotel load for 3.5 months in which all performance was taken up front.</p> <p>Also contributing to the negative SV is PBS RL-0013 due to early subcontractor completion of the revised CSS final design package which was planned in the current period.</p> <p>Finally, the negative SV for PBS RL-0030:</p> <ul style="list-style-type: none"> • Composite Analysis vadose zone model runs were delayed as a result of in-scope unplanned work encountered in a prior period along with a slow down as the new computing system was installed. The slowdown was further delayed by limited resources which were allocated to higher priority work. • The selected subcontractor for the M-24-00 five-well campaign submitted an amended drilling schedule with a later start date than planned, resulting in the delay of subcontractor mobilization and drilling initiation. • Performance on Ground Water Sample Collection was over-stated in a prior period. A reconciliation performed in June identified incorrect performance for some activities. • The planned procurement of a pump-setting rig has been delayed because of bids requiring a 12-month lead-time for delivery. The rig is now expected to be received in FY2020. <p>The current month negative cost variance (CV) is primarily due to PBS RL-0011 attributed to labor and subcontract costs for lagging performance on demolition activities. Demolition of the remaining PFP structures has been slower than planned due to wind impacts and a deliberate rate of demolition and debris loadout. The deliberate rate of demolition is appropriate to allow for proper sequencing and critical consideration of activities so they may be performed safely.</p> <p>Also contributing to the negative CV is PBS RL-0040 attributed to incurring change orders for directing the grout contractor to perform additional demobilization activities for PUREX Tunnel 2, including removal of the power drop at the Integrated Disposal Facility, repair of the perimeter fence, and removal and disposal of the conveyances. The variance is also attributed to performing 242-B/BL D&D work scope that is not currently in the proposed baseline. This project is well ahead of schedule and this authorized scope is expected to be definitized within the quarter. Finally, the discovery of mercury on the seventh floor of the REDOX silo gallery continues to halt progress as costs for updating air sampling, worker safety documentation, and industrial hygiene controls continue.</p> <p>The negative CV is partially offset by PBS RL-0013 adjustment for work performed in prior periods in the IDF Facility Modifications account. This was authorized via implementation of BCR-013-008R0 "Changes to FY2019 IDF Design Estimate."</p> <p>Cumulative Schedule Variance: The variance is within reporting thresholds.</p> <p>Cumulative Cost Variance: The variance is within reporting thresholds.</p>									
Impact:									
<p>Current Period Schedule: The current month schedule variance is not expected to impact the overall contract schedule.</p> <p>Current Period Cost: Cost impacts are being estimated and will be incorporated in the project estimate to complete (ETC).</p> <p>Cumulative Schedule: N/A</p> <p>Cumulative Cost: N/A</p>									

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

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

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

CHPRC continues to track completion of the contract within budget and is currently projecting a variance at completion of \$135.6 million, with \$63.3 million of management reserve (MR), for a total positive variance of \$198.9 million. For June, the project was 15.9 percent behind schedule and 8.6 percent over planned cost. Contract to date; the project was 0.7 percent behind schedule and 2.2 percent under planned cost.

There was no change in the difference between the Contract Budget Base and the Total Allocated Budget on Format 3 for the month of June. The current negative delta is due to the request from PRC RL Contracting Officer (CO), documented in Correspondence No.1704418A, to implement a \$7.1 million drawdown for contingency in BCR-011C-17-013R0. The RL CO has not incorporated the directed \$7.1 million contingency drawdown into the PMB CBB, resulting in the negative delta. There was also an adjustment for \$0.6 million to align AUW to the global settlement.

Four of the five BCRs implemented in the period impacted the PMB:

- BCR-013-19-008R0, Changes to FY2019 IDF Design Estimate
- BCR-030-19-008R0, Incorporate Additional FY2019 Work Authorization RL-0030
- BCR-040-19-004R0, Initiate Planning for the Stabilization of 216-Z-9, 241-Z-361, and 216-Z-2
- BCR-041-19-009R0, 100K PCM Replacements and STSC Purchase

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 +\$135.6 million, +2.2% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPS - In Process		
	Total Authorized Unpriced Work	\$575,567
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	Grand Total Adjustments	\$575,567

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

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
N/A	N/A	N/A	2019	\$0

There was no change to UB in June.

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 June.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2019	\$0

There was no change to fee in June.

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:
07/17/2019

Approved by:

Date:

Appendix B

Project Services and Support (WBS 000)



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

M. A. Wright
Vice President for
Project Technical
Services

June 2019
CHPRC-2019-06, 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 quarterly.

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 will be maintained through disposition of buildings or square footage reduction.	9/30/2019	70%
19-EMS-PTS-OBJ1-P1	Spill prevention/waste minimization/pollution prevention	Reduce and/or eliminate spills to the environment by surveillances and ongoing training. Monitor and evaluate spill prevention program and existing techniques. Survey universal waste and recycling areas.	9/30/2019	72%
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	74%

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	1	5	6/3/2019 – Employee complained of right hand pain due to increased computer work to which they were not accustomed. Employee evaluated at HPMC and released back to work without restrictions. (25185)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- There was one injury reported during this quarter in the functional groups.
 - o Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
 - Performed Senior Supervisory Watch (SSW) at the Plutonium Finishing Plant (PFP) Closure Project.
 - Supported PFP High Risk Management Assessment (MA).
 - Provided technical support to K Basin Operations to address identified suspect Miller shock-absorbing lanyards.
 - Hired an industrial hygiene technician first line manager to support River Risk Management Project (RRMP).
 - Hired an OS&IH manager to support RRMP.
 - Directly supported the annual Health & Safety Expo held at the TRAC Center in Pasco.
 - Initiated campaign #chprc-summer-safety-2019.
 - Supported multiple projects with developing/reviewing industrial hygiene exposure assessments.
 - Attended multiple critique meetings to address potential industrial hygiene issues.
 - Reviewed and approved the Environmental Restoration Disposal Facility (ERDF) recovery plan to resume disposition of waste.
 - Developed an industrial hygiene program response plan to track actions to address recent project implementation issues.
 - Conducted a commonality review of recent project industrial hygiene implementation issues.
 - Published minor change to PRC-MP-SH-52768, *Beryllium Management Plan*.
 - Initiated revision process to address project feedback on PRC-PRO-SH-40499, *Safety and Health Inspections*.
 - Interfaced with Property Management to assist in excess equipment request determinations.
 - Supported various projects with industrial hygiene sampling and monitoring equipment needs.
 - Completed work site assessment (WSA) on beryllium exposure hazards, specifically focused on CHPRC's compliance with DOE-0342, *Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP)*.
 - Completed WSA to review the American Conference of Governmental Industrial Hygienists (ACGIH) 2019 Threshold Limit Values for program applicability, SHS&Q-2019-WSA-21255.
 - Completed WSA to assess the implementation of PRC-PRO-SH-17916, *Industrial Hygiene Exposure Assessments*, across all CHPRC projects.
 - Developed the OS&IH organization transition briefing book.
 - o Radiological control accomplishments:
 - Completed WSA related to 10 CFR 835, subpart E and L.
 - Initiated WSA related to 10 CFR 835, subpart M.

- Completed radiological training WSA at PFP. Conducted reviews of radiological personnel training at all projects.
- Radiological control technician (RCT) trainees – completed block training, classroom training, and successfully passed fundamentals and site academics exams. Trainees are reporting to their assigned projects to complete on-the-job training / on-the-job evaluation and perform work as qualifications allow.
- Held quarterly RADCON Leadership meeting.
- Completed software management plan/software quality assurance documentation of APEX Gamma software for use at Central Radiological Counting Facility (CRCF).
- Trained PFP and CRCF personnel on the use of the APEX Alpha/Beta software.
- Supported Emergency Preparedness (EP) reviewing drill scenarios; supported sitewide exercise and controller/evaluator duties at project drills.
- Supported projects in performing field Surveys with Bladewerx Alpha Survey Meter.
- Provided radiological work planning support for Central Plateau Risk Management (CPRM) (242-B/BL and REDOX projects).
- Providing Clearance Survey Plan Preparation training, and Radiological Work Planning initial and refresher training for project personnel.
- Conducted monthly RADCON Managers presentations to the U.S. Department of Energy, Richland Operations Office (RL).
- Continued RCT first line manager (RCFLM) leadership seminars.
- Continued support of the Hanford RADCON Forum authorized limits and exemptions working group, which produced a document outlining proposed changes for the Hanford Site.
- Mentored projects on implementation of Completed Decision Making Package PRC-1809-CDMP-0147, *Outdoor Air Emission Technical Basis Document*.
- Continued providing weekly updates to Radiological Protection organization to ensure important information is shared.
- Installed iPCM-12 whole body monitors at 324; revised applicable procedures to include iPCM-12 processes.
- Provided management oversight practice support for PFP clearance survey process.
- Started process to integrate ARACS data into Sentinel software.
- Continued work with improving and testing of Sentinel software.
- Held onsite leadership training course by Eckerd College: “Maximizing Your Leadership Impact.”
- Convened Radiological Oversight and Assistance Committee (ROAC) visit.
- Approved CPRM Technical Equivalency Determination for Alternate to Article 452.1 Requirement for high efficiency particulate air filtered vacuums.
- Supported 324 Building to determine path forward for reduced strontium controls.
- Conducted brown bag lunch sessions with RCTs at ERDF, Central Waste Complex (CWC), T Plant, PFP, and fuels facilities.
- Conducted company level as low as reasonably achievable meeting.
- Initiated CHPRC transition planning.
- Continued support to projects with lapel sampler issues.
- Continued Conduct of Work meetings with attendance from RCTs and RCFLMs from various projects.
- Continued progress in RCFLM meetings.
- Attended BCP Engineering presentation on innovative technology, including area mapping, work processes, and consulting services. Proposal intended for upcoming REDOX work.

- Provided technical support and information to StoneTurn Group, LLP consultants regarding PFP, CHPRC, and Hanford Site procedures, processes, and protocols.
- o Nuclear operations support and compliance accomplishments:
 - Correspondence transmitted to RL:
 - Letter, CHPRC-1901353, dated April 15, 2019, *Transmittal of the 2019 Annual Update of the Reduction-Oxidation Facility Safety Basis and the Unreviewed Safety Question Determinations Summary for the Reduction-Oxidation Facility.*
 - Letter, CHPRC-1800428.1, dated April 15, 2019, *Transmittal of the Documented Safety Analysis for the Canister Storage Building, HNF-52059, Revision 0; the Technical Safety Requirements for the Canister Storage Building, HNF-52060, Revision 0; and the Fire Hazards Analysis for the Canister Storage Building, HNF-52062, Revision 1.*
 - Letter, CHPRC-1901412, dated April 24, 2019, *Submittal of the Annual Update of the Plutonium-Uranium Extraction Facility Safety Basis and the Unreviewed Safety Question Determinations Summary.*
 - Letter, CHPRC-1901504, dated May 1, 2019, *Annual Review of the Package-Specific Safety Document for Steel Drums, CHPRC-01039, Revision 3.*
 - Letter, CHPRC-1901521, dated May 2, 2019, *Transmittal of the Evaluation of Safety of the Situation for Drops from the Waste Encapsulation and Storage Facility Canyon Crane into the Pool Cell Area, CHPRC-04041, Revision 0.*
 - Letter, CHPRC-1901739, dated May 6, 2019, *Request for Approval of the One-Time Request for Shipment for Sludge Transport from K West Basin to T Plant, CHPRC-03111, Revision 3.*
 - Letter, CHPRC-1901804, dated May 13, 2019, *Transmittal of the Preliminary Documented Safety Analysis for the Capsule Storage Area, CHPRC-03744, Revision 0, for RL Review and Approval.*
 - Letter, CHPRC-1901873, dated May 20, 2019, *Transmittal of the 2019 Annual Update of the 241-Z-361 Tank Facility Safety Basis and the Unreviewed Safety Question Determination Summary.*
 - Letter, CHPRC-1901207A R1, dated May 29, 2019, *Documentation for Continued Use of RADIDOSE Version 3.0 Software.*
 - Letter, CHPRC-1902098, dated June 3, 2019, *Transmittal of the 2018 through 2019 Annual Unreviewed Safety Question Summary for CHPRC Transportation Safety.*
 - Letter, CHPRC-1901521.1, dated June 17, 2019, *Transmittal of the Evaluation of Safety of the Situation for Drops from the Waste Encapsulation and Storage Facility Canyon Crane into the Pool Cell Area, CHPRC, Revision 1.*
 - Letter, CHPRC-1902404, dated June 26, 2019, *Transmittal of the 2019 Annual Update of the 224-T Facility Safety Basis and the 2018 and 2019 Unreviewed Safety Question Determinations Summary.*
 - Letter, CHPRC-1902433, dated June 26, 2019, *Transmittal of the 2019 Annual Update of the B Plant Safety Basis and the Unreviewed Safety Question Determinations Summary.*
 - Correspondence received from RL:
 - Letter, 19-NSD-0024_RL, dated March 27, 2019, *REISSUE – Safety Basis Review Team (SBRT) Review Documentation for the Canister Storage Building (CSB) Documented Safety Analysis (DSA), HNF-52059 Revision 0, and Technical [sic] Safety Requirements (TSR), H-NF-52060 [sic] Revision 0.*
 - Letter, 19-NSD-0025_RL, dated April 18, 2019, *Approval of the Solid Waste Operations Complex (SWOC) Master Documented Safety Analysis (MDSA), HNF-14741, Revision 12A; the Technical Safety Requirements (TSR) for the SWOC Complex, HNF-15280, Revision 12A.*

- Letter, 19-NSD-0021_RL REISSUE, dated April 18, 2019, *Approval of the Monolith Special Packaging Authorization (M-SPA), HNF-62901, Revision 0.*
 - Operational Awareness #81396 – 2019 Annual Update of Fast Flux Test Facility (FFTF) Safety Basis (No Changes Requiring SER).
 - Operational Awareness #RL-ASMT-2019-0514 – Annual USQ Screenings and Determinations for PFP, Z-9, 324, and 241-Z-361.
 - Operational Awareness #RL-ASMT-2019-1598 – 2019 Annual Update of the PSSD for Steel Drums (CHPRC-01039, Rev. 3) (No Changes).
 - Operational Awareness #RL-ASMT-2019-1815 – PUREX Annual Update and USQD Summary.
 - Operational Awareness #RL-ASMT-2019-0500 – Criticality Safety Program Review.
 - Operational Awareness #RL-ASMT-2019-1687 – DOE RL Nuclear Safety Evaluation of Safety of the Situation for Drops from the Waste Encapsulation and Storage Facility Canyon Crane into the Pool Cell Area, CHPRC-1901521.
 - Letter, 19-NSD-0029_RL, dated June 4, 2019, *Approval of the One-Time Request for Shipment (OTRS) for Sludge Transport from K West Basin to T Plant, CHPRC-03111, Revision 3.*
 - Operational Awareness #RL-ASMT-2019-2137 – Review 2019 USQ Summary for 241-Z-361.
 - Letter, 19-NSD-0023_RL, dated June 25, 2019, *Approval of the Documented Safety Analysis (DSA) for the Canister Storage Building (CSB), HNF-52059, Revision 0, and the Technical Safety Requirements (TSR) for the CSB, HNF-52060, Revision 0.*
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
- Screened 863 Condition Reports (CRs):
 - Two significant issues identified.
 - Eight adverse issues identified.
 - 329 track until fixed issues identified.
 - 248 trend only items identified.
 - 270 opportunities for improvement (OFI) items identified.
 - Seven screened out.
 - Administratively closed 793 CRs and 1,027 CRs actions.
 - Provided Course No. 600082, *CHPRC Responsible Manager Training, Issues Management*, to CHPRC personnel.
 - Provided full time support to PFP Issues Management and Occurrence Reporting activities.
 - Provided Occurrence Reporting support to the River Risk Management Project.
 - Submitted Occurrence Reporting and Processing System (ORPS) notification report and final report for EM-RL--CPRC-ERDF-2019-0001, *Potential Worker Exposure to Ammonia.*
 - Submitted ORPS notification report for EM-RL--CPRC-324FAC-2019-0002, *Potential Worker Exposure to Acrylamide.*
 - Submitted Noncompliance Tracking System (NTS) report NTS-EM-RL-CPRC-SNF-2019-00099798, *Employee's Finger Injured While Positioning Forks Attached to a Backhoe.*
 - Provided support and coordination for the Defense Nuclear Facilities Safety Board (DNFSB) onsite observation of PFP Readiness Assessment.
 - Provided support and coordination for the onsite tour of CHPRC projects by DNFSB Deputy Technical Director, Ms. Katherine Herrera.
 - Provided support and coordinated visit by DNFSB Chairman, Mr. Bruce Hamilton.
 - Provided support for the Bi-Monthly DNFSB Resident Inspector Meeting.
 - Provided 30 documents in response to DNFSB requests for information.
 - Provided support to the DNFSB Hanford Site Resident Inspectors.

- Coordinated review and comment resolution of the Weekly Hanford Site Resident Inspector Report.
- Submitted the PFP Preliminary Notice of Enforcement response letter to the Office of Enforcement.
- Submitted one external Lessons Learned (LL) in OPEXShare: 2019-CPRM-0001, *Induced Voltage Discovered During Safe Energy Check*.
- Submitted one external just-in-time in OPEXShare: 2019-RL-HNF-0001 Rev 1, *Ungrounded Short Discovery in Process Technology HTX Series Heater*.
- Submitted two internal Hanford LL in OPEXShare: 2019-SGRP-0001, *Less than Adequate Quality Inspection Leads to the Acceptance and Installation of Faulty Non-NRTL Equipment*; 2019-SGRP-0002, *Bobcat Bucket Detaches and Slides into Container*.
- Submitted three internal LL in OPEXShare: 2019-KBO-0002, *Recent Events Highlight the Need to Respond Conservatively to Unexpected Conditions*; 2019-KBO-0003, *Identification of Affected Systems Before Routine Maintenance*; 2019-KBO-0004, *Improper Tool Selection and Use Leads to Near Miss*.
- Submitted one internal Best Practice in OPEXShare: 2019-SHSQ-0002, *Summary of Good Practices Found by RL During Safety Culture Surveillance at CHPRC*.
- Provided primary SHS&Q point of contact support to generation of SHS&Q transition books.
- Provided support in generation of core information in support of CHPRC project and program transition books.
- Published the monthly Contractor Assurance System Summary Report.
- o Performance oversight, assessment, and quality assurance accomplishments:
 - Conducted in-field activities for the 10 CFR 835 Subpart C, *Standards for Internal and External Exposure*, assessment.
 - All personnel completed the CHPRC Conduct of Work computer-based training course.
 - Provided specific mentoring and feedback to assessors and responsible managers who conducted MAs. Feedback was provided to help improve the quality, clarity, and readability of future reports. Provided specific assessment mentoring to K Basin Operations, CPRM, Soil and Groundwater Remediation Project (S&GRP), RRMP, Waste and Fuels Management Project, Prime Contract and Project Integration (PC&PI), Business Services, and SHS&Q organizations.
 - Initiated, performed, and conducted an exit brief for SHS&Q-2019-Audit-21249, *CHPRC Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance Program*, audit.
 - Completed and issued PO-2019-MA-21592, *Repetitive Use Work Package Hazard Analysis Quality*.
 - Completed and issued RRMP-2019-MA-22154, *Sponsored Management Assessment for Operation Effectiveness of 324 Project*. SHS&Q provided oversight of the MA planning, performing, and report writing.
 - Completed the CHPRC QA Surveillance, SHS&Q-2019-SURV-22806, PRC-MP-QA-599, Section 5.0 (b) Work Processes (5.3.3, 5.3.4, 5.3.6) Special Process, Identification and Control of Items, Nondestructive Assay (NDA).
 - Completed and issued SHS&Q-2019-SURV-22807, Revision 0, June 18, 2019, *PRC-MP-QA-599, Section 6.0 Design*, design and procurement of the 300-296 SRP, *Waste Bin Radiation Assay System (WBRAS)*, Probe Tube Shield Assembly (PTSA)
 - Completed and issued SHS&Q-2019-Audit-21249, *CHPRC Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance Program*, audit.
 - Initiated FY2020 assessment planning activities.
 - Completed SHS&Q-2019-SURV-21597, *WSA Compliance*, which is a follow-up to SHS&Q-2018-WSA-21102.

- Completed SHS&Q-2019-SURV-22616, PRC-MP-QA-599, Section 4.0 “Documents and Records.”
- Completed annual update and pulished Revision 4-4 to PRC-MP-QA-599, *Quality Assurance Program*.
- Completed procedure update to PRC-PRO-QA-9662, *Independent Assessment Process*.
- Completed QA Surveillance SHS&Q-2019-SURV-23685, OCRWM Records Storage Area Access List Posting.
- Transmitted to RL, CHPRC-1902009, *Annual Submittal of the Quality Assurance Program, PRC-MP-QA-599, Review for Approval*.
- Initiated fiscal year (FY) 2020 assessment planning activities.
- o Fire Protection (FP) accomplishments:
 - Provided input on proposed revision to 400 Area Waste Management Unit permit that would support deactivation of the FFTF fire alarm system.
 - Issued updated PFP Fire Hazard Analysis (FHA).
 - Completed Facility Fire Protection Assessments for Waste Encapsulation and Storage Facility (WESF) facilities (225BC, 225BD, 225BE, 225BF) and 100 DX Pump and Treat (P&T) Transfer Building.
 - Continued transition activities involving FP program documentation.
 - Provided input to an estimator to develop cost estimates for correction of identified fire system deficiencies.
 - Completed 324 Building Quarterly Combustible Loading WSA for the third quarter.
 - Completed Maintenance and Storage Facility (MASF) permit walk down.
 - Continue to perform numerous work package reviews and issue Hanford Fire Marshal permits in support of planned activities.
 - Performed WESF monthly walk down.
 - Supported evaluation of options for Interim Safe Storage of K East and K West Reactors.
 - Resolved comments from the Hanford Fire Marhsal’s Office on the FFTF FHA and prepared for transmittal to RL.
 - Performed Integrated Disposal Facility (IDF) sprinkler design review.
 - Identified fire line tie-in points for W-135 Project.
 - Developed training material on FP requirements for program and project personnel.
 - Provided two weeks of fire protection engineer support for Savannah River Site (in South Carolina) Independent Fire Protection Assessment.
- o Conduct of Work Mentor activities:
 - Provided SHS&Q vice president on mentoring observations.
 - Had discussions with RADCON and safety and health (S&H) directors about observations and to remind them to engage the mentor as needed.
 - Attended numerous plan of the days and pre-job briefings associated with 324 Buidling, 100K, CPRM, ERDF, and S&GRP, and provided feedback on good practices and areas for improvement.
 - Discussed observations and provided feedback to Occupational S&H managers associated with ERDF and 324 Buidling. Provided feedback to the RADCON manager associated with CPRM work activities.
 - Attended event fact-finding meeting related to the 324 Building acrylamide work.
 - Provided feedback to 324 Building Operations Manager regarding the readiness of their Occupational S&H group and certain fieldwork supervisors (FWS).
 - Provided input to causal analysis process regarding the ERDF ammonia exposure issue and the 324 acrylamide work.
 - Developed ideas to improve the clarity and effectiveness of the current RADCON metric charts.

- Attended several Employee Zero Accident Council meetings and provided feedback to the co-chairs.
- Attended the CHPRC President’s Zero Accident Council meeting.
- Attended the Conduct of Work meeting for RADCON.
- Attended the OS&IH staff meeting.
- Assisted other mentors with weekly Conduct of Work shares.
- Attended Conduct of Work staff meetings.

Environmental Program and Strategic Planning (EP&SP)

• Environmental Protection

- o Provided CHPRC Green House Gas certification to Mission Support Alliance, LLC (MSA) supporting publication of the Calendar Year 2018 Green House Gas Emissions Report to the state of Washington Department of Ecology (Ecology).
- o Completed certification process for CHPRC data input to the Site Toxic Chemical Release Inventory Report.
- o Provided technical support to CPRM in developing an implementation strategy for the REDOX Removal Action Work Plan, Air Monitoring Plan requirements.
- o Provided support to S&GRP and RL in developing response to Ecology concerns regarding the methodology for calculating the critical mean values for interim status facility groundwater monitoring wells. The response has been delivered to RL for submittal to Ecology.
- o Facilitated the coordination and tracking of CHPRC project activities, including major risk labeling and documenting revisions necessary to implement Washington Administrative Code (WAC) 173-303, “Dangerous Waste Regulations” (changes that became effective on April 28, 2019).
- o Coordinated review and comment resolution to incorporate WAC 173-303 changes, and issued finalized revision of PRC-PRO-EP-15333, *Environmental Protection Processes*.
- o Prepared and submitted Class 1 Permit Modification for adding satellite accumulation areas to contingency plan of 400 Area waste management nit for Ecology and RL informal review.
- o Provided technical support to offsite Department of Energy Consolidated Audit Program audit of Energy Solutions, LLC in Clive, Utah. Audit determined that the facility continues to be acceptable for managing DOE Complex wastes.
- o Provided support to RRMP in developing the radioactive and toxic air emissions elements of the draft IDF Resource Conservation and Recovery Act (RCRA) Dangerous Waste Permit.
- o Provided support to the following inspection activities:
 - Annual Hanford Site RCRA Inspections (RL).
 - RCRA Compliance Inspection at Waste Receiving and Processing Facility WRAP and CWC (Ecology).
 - Major Stack Inspection at T Plant (Washington State Department of Health [WDOH]).
 - RCRA Inspection of Single-Shell Tank Farms B/BX/BY (Ecology).
 - Permit writers visit to CWC Outside Storage Area A (Ecology).
 - Air Operating Permit Inspection at the 400 Area and WESF (Ecology).
 - RCRA Dangerous Waste Compliance Inspection of 241-CX Tanks (Ecology).
 - Major Stack Inspection at Waste Receiving and Processing Facility (WDOH).
 - Permit writers visit to 400 Area, including the Interim Storage Area, Fuel Storage Facility, MASF, and FFTF (Ecology).
 - RCRA inspection of 216-A-29, 216-A-37, 216-A-36B, 216-B-63, 216-S-10, and 216-B-3 waste sites.
 - RCRA inspection of 183-H Solar Basins, 300 Area process trenches, low-level burial ground Green Islands, and nonradioactive dangerous waste landfill.

- **Environmental Compliance and Quality Assurance**
 - Assessment Status
 - Completed surveillance EP&SP-2019-SURV-21924, Environmental Quality Assurance Program Plan Implementation, on April 2, 2019, which resulted in no findings and two OFIs.
 - Completed surveillance EP&SP-2019-SURV-21933, Air Operating Permit Corrective Action Effectiveness Review, on April 30, 2019, which resulted in no findings and one OFI.
 - Completed surveillance EP&SP-2019-SURV-21931, Scrap Metal Recycling, on May 29, 2019, which resulted in two findings and three OFIs.
 - Completed surveillance EP&SP-2019-SURV-21925, Compliance to the Underground Injection Control Program, on June 18, 2019, which resulted in six findings and three OFIs.
- **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 April through June 2019, a total of 79 environmental documents supporting various CHPRC projects were completed through EP&SP Publication Services, established to provide a systematic process for performing technical editing and formatting of environmental documents.

Business Services

- **Supply Chain/Acquisitions:**
 - Established an expedited acquisition strategy for performing short-term small works construction activities at the 324 Building Disposition Project.
 - Developed approaches for promoting the use of apprentices within building trades on the Hanford Site. The scenarios are in support of the Hanford Future Workforce Subcommittee.
 - Held acquisition planning meeting for roof replacement at the Waste Receiving and Processing facility. Anticipate award in late June.
 - Developed initial acquisition plan for the W-135 project MASF construction effort that will be used to mockup the cesium/strontium (Cs/Sr) capsule removal operations at the WESF. Scheduled for award in early July 2019.
 - Completed W-135 acquisition planning for the Cs/Sr cask storage system to purchase additional storage casks.
 - Established the acquisition strategy to acquire project controls support at 100K. The Request for Proposal was issued with award scheduled for July 2019.
 - Finished testing of the Buyer's Technical Representative Cost Acknowledgment System (BCAS) tool for MSA costs and performed a soft roll-out to the Buyer's Technical Representative (BTRs) for their use.

- o Worked with DOE-HQ to identify potential opportunities for complex-wide procurements that involve regulated/non-regulated laundry services.
- o Awarded a Basic Ordering Agreement (BOA) in June 2019 for pre-award audit services. Two more BOAs for audit services are to be awarded in early July 2019.
- o Developed Waste & Fuels Management Project Basic Ordering Agreement for engineering resources. Contract scheduled to be awarded in July 2019.
- o Commenced with the pre-award audit of the proposal for Risk Modeling and Assessment work. The audit is scheduled to be completed the first week of July 2019.
- o Performed the fifth BTR forum. BTR-related items discussed included BTR dashboard reporting, proper coding of MSA request for services, updating SOW templates, temporary services subcontracting approaches, and planned BTR training modules and concepts.
- o Reviewed the Supply Chain Management Center (SCMC) agreement for prescription safety glasses for application and use at CHPRC.
- o Completed the draft non-competitive justification for extension of services at ERDF.
- o Established an acquisition strategy for the procurement of an air stripper system and an ion exchange skid for the S&GRP. Responses to the expression of interest are due the first week of July 2019.
- **Procurement:**
 - o In the third quarter of FY2019, 358 contracts were awarded/amended with a total value of \$18.77 million. Additionally, 882 new material purchase orders (PO) valued at \$3.5 million were awarded to support ongoing project objectives.
 - o At the end of 129 months of the CHPRC project, procurement volume has been significant: \$2.878 billion in contract activity has been recorded with approximately 55.9 percent (\$1.6 billion) awarded to small businesses. These awards include 8,597 contract releases, 28,939 POs, and 327,758 PCard transactions.
 - o Major contract awards:

Contract/Release	Award Date	Awarded To	Title	Contract Type	Value (\$M)
44438-70	4/11/2019	DGR Grant Construction Inc.	Redox Haul/Access Road and CTA	FFP	\$0.29
68758-1	4/17/2019	Perma-Fix Northwest Richland	Low Level Waste Services	FFU	\$0.18
68761-1	4/17/2019	Perma-Fix Northwest Richland	Mixed Low Level Thermal Treatment Services	FFU	\$0.17
69346	4/23/2019	Ojeda	105 KE Asbestos Encapsulation & Removal	FFU	\$0.45
65723-16	6/3/2019	Ojeda	Misc. Construction Services Support 300-296 Project	T&M	\$0.56
69891	6/13/2019	Two Rivers Terminal, LLC	200 West P&T Chemicals	FFU	\$0.76
53921-6	6/18/2019	Columbia Energy & Environmental Services	Design Engineering Services for T-Plant Exhaust Fan 3	FFP	\$0.28
70088	6/20/2019	PAR Systems, LLC	B-Cell 10-Ton Crane for the 324 Building Disposition Project	FFP	\$0.61

- **Facilities & Property Management (F&PM):**
 - o Procurement of the new six- and two-wide mobile offices (MO) near the Plutonium Uranium Extraction Plant (PUREX) for CPRM continues. Delivery is expected during the third week of August.
 - o Relocation of three MOs from Research Technology Laboratory Project (Pacific Northwest National Laboratory, Richland) to B Plant is complete. Set up and occupancy was completed in mid-May 2019.
 - o Installation of four-wide and restroom MOs for CPRM at REDOX scheduled for completion in late July 2019.
 - o The FY2019 Personal Property Inventory Campaign is 97 percent complete.

- **Finance:**
 - o 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.
 - o Completed April through June month ends with no cost suspensions.
 - o Provided third Quarter Lease Costs & Commitments reports.
 - o Provided support for the FY2016 Incurred Cost Report Audit.
 - o Submitted the FY2019 second quarter reconciliation of RL's Accounts Payable – Accrued Liabilities account (Number 2110).
 - o Provided support for FY2018 CR 4111 Capital Projects Closeout Assessment.
 - o Submitted FY2016 Incurred Cost Report Audit Response.
- **Information Management:**
 - o Processed 160,156 electronic records during the third quarter of FY2019 into the Integrated Document Management System (IDMS).
 - o Continued work with MSA to disposition upgrade issues with desktop equipment in support of site Windows 10 upgrade project. To date, 661 workstations have been replaced or returned.
- **Material Services:**
 - o Completed a walk down of convenience storage items in 2101M. Working with field personnel to determine if items need to be retained.

Prime Contract and Project Integration (PC&PI)

- **Project Management/Compliance Assessments (PM/CA)**
 - o Assisted the PFP Closure Project to prepare Baseline Change Request (BCR)-011C-19-002R0, *Allocation of PBS RL-0011 CAP 2 Project DOE Contingency*. The purpose of the BCR, which was approved by RL and CHPRC, is to draw RL contingency for the RL-0011.C2 PFP Demolition Capital Asset Project to address impacts from loss of Hanford Atomic Metal Trades Council (HAMTC) represented employees to other Hanford Site contractors, unplanned harsh winter weather, and stop works that occurred after the development of the revised RL-0011.C2 Project performance measurement baseline (PMB) approved by DOE-HQ.
 - o Continued to support CHPRC preparations required for the transition to the Central Plateau Closure Contract contractor, including review and comment on a rough order of magnitude estimate of the CHPRC cost to support transition planning and execution and the final draft of the CHPRC Transition Plan. PM/CA also provided a PC&PI transition planning lead.
 - o At the request of Prime Contract Compliance, performed an impact assessment for the potential incorporation of CRD O 413.3B Change 5, *Program and Project Management for the Acquisition of Capital Assets*, into the Plateau Remediation Contract (PRC). The review determined that the Contractor Requirements Document (CRD) revision could be incorporated into the PRC with no impacts to the FY2019 proposed cost or fee.
 - o In conjunction with members of the Project Integration and Project Support Services organizations, finalized an update to the material for the CHPRC two-day class, Course #600217, *Earned Value Management System Training*, scheduled for the end of June.
 - o Led the performance of PC&PI-2018-Audit-22138, *CHPRC Earned Value Management System Annual Self-Assessment*, the FY2019 self-assessment of the continued compliance of the CHPRC Earned Value Management System (EVMS) as required to maintain the CHPRC EVMS DOE-HQ certification. The assessment was performed by Project Time & Cost (PT&C) to validate the continued compliance of the CHPRC EVMS with selected EIA-748-D, *Earned Value Management Systems*, guidelines during May and June 2019. Assessment of all applicable guidelines was addressed by the sum of CHPRC FY2019 self-assessment efforts and PT&C review. The assessment found 31 of the 32 EIA-742 guidelines were compliant. Guideline 20, *Identify unit costs, equivalent unit costs, or lot costs*, is applicable only for manufacturing operations that do not apply to PRC scope. Eleven opportunities for improvement (OFI) were identified in nine of the 32 guidelines, which compares favorably with last year's self-assessment

- that identified 18 OFIs across 15 guidelines. The final report was received the end of June. The next step is to brief RL on the results and formally transmit the final report to RL to document the performance of the required assessment.
- o Continued to facilitate the performance of the PC&PI Assessment Plan. As of June month end, eight of 11 assessments planned in FY2019 were complete.
 - **Prime Contract Compliance (PCC):**
 - o April through June, PCC received and processed nine contract modifications (697-699, 701-703, 705-706, and 708) from RL.
 - o The Correspondence Review Team received and determined the distribution and assignment for 175 incoming letters/documents. PCC reviewed 122 outgoing correspondence packages.
 - o Submitted CHPRC-1900941, *Notification of Potential Impacts due to Severe Weather*.
 - o Submitted CHPRC-1901619, *Transmittal of Revised Pricing for Proposal Number CP ALL PRC 1710, For Plateau Remediation Contract Extension, Period October 1, 2018, through September 30, 2019*.
 - o Submitted CHPRC-1901619.10, *Additional Work Scope: Revised Pricing for Change Proposal Number CP ALL PRC 1710, CHPRC-1901619*.
 - o Submitted CHPRC-1902231, *Completion of Fiscal Year 2019 Key Performance Goal "Complete Final Design Report for Cesium/Strontium Cask Storage System"*
 - **Project Integration**
 - o Project Support, Systems Integration and Schedule Integration
 - Project Support and Systems Integration completed three WSAs:
 - o PC&PI-2019-WSA-22132, Review of Monthly Process to Prepare Contract Performance Report (CPR) Formats 1-5
 - o PC&PI-2019-WSA-22133, Evaluate the Status of Control Account Manager Notebooks
 - o PC&PI-2019-WSA-23150, Cost Information System work breakdown structure (WBS) Dictionary and Basis of Estimate Validation
 - Developed training materials for the Cobra Subcontract database to complete Quantity Based Estimating for the FY2020 PMB annual update, and conducted five training sessions for project personnel.
 - Coordinated delivery of FY2019 Mid-year Budget Execution Review for HQ, as requested by RL.
 - Reprised Cobra forecast files in April from the FY2019 provisional rates submitted in October 2019 to the FY2018 effective rates directed by RL for costing.
 - o Supported the FY2019 DOE financial statement audit, information technology, by successfully demonstrating the Cobra and Primavera applications maintain security management, access controls, configuration management, segregation of duties, and contingency planning.
 - o 000 Project EVM Support and Reporting:
 - Issued three months of CHPRC Monthly Performance Reports to RL.
 - Submitted the March, April, and May Gold Metrics to RL.
 - Completed safety hour reporting each month.
 - Compiled integrated project team (IPT) and monthly project review packages for March, April, and May.
 - **Project Support Services**
 - o Risk Management:
 - Supported project risk reviews and updated risk registers.
 - Supported Post Contract Baseline (PCB) update deliverable for risk-specific activities. Met with projects to conduct risk elicitations 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.

- o Estimating and Program Support
 - Supported the FY2019 Pricing Evaluation, submitted to RL on May 2, 2019. This document was the basis for the June 2019 definitization of CP ALL PRC 1710 PRC Extension Period, October 1, 2018 – September 2019.
 - Provided responses to requests for information (RFIs) from RL on Addendum 002 for CP ALL PRC 1710 – Plateau Remediation Contract Extension, Period October 1, 2018, through September 30, 2019.
 - Provided estimating support for the FY2020 PCB preparation.

Resource Management and Strategic Integration (RMSI)

• Human Resources (HR):

- o Completed update to PRO-HR-042, *Fitness for Duty*. Published June 6, 2019, with implementation scheduled for July 8, 2019, in support of new site wide random drug testing program.
- o Communicated to all employees in advance of required reading on June 10, 2019, for Random Testing Program.
- o Updated Personal Time Bank procedure (PRO-HR-073, *Personal Time Bank and Other Absences*) that aligned compensation time with exempt overtime procedure (PRO-HR-036, *Exempt Overtime and Shift Differential*). Published June 3, 2019.
- o Completed Compliance Matrix procedure review. Created an action list based on the review.
- o Attended two-day HR/Labor Law training led by attorney Ray Deeny.
- o Attended Labor Law and Labor Arbitration conference.
- o Provided Office of Federal Contract & Compliance Program (OFCCP) with a large, multi-year data file on June 6, 2019, within the two-week time period requested.
- o Implemented required reading for new random testing program.
- o Completed OFCCP data request on June 10, 2019, meeting the due date (with a one-day extension offered by OFCCP).
- o Participated in investigation training.
- o Supported VP and director staff meetings and provided information on performance ratings and salary planning.
- o Facilitated two Safe & Drug Free Workplace classes for managers in support of the new random testing program. HR Project Services representatives attended to provide support.
- o Submitted required reading on June 11, 2019, for SOC and Employee Discipline – 81 percent completed as of June 20, 2019.

• Staffing and Development:

- o Performed two Kaizens, Orientation and Onboarding – working over 50 actions associated with process improvements.

• Labor Relations (LR):

- o The following is a list of grievances in the arbitration process and their status:
 - Arbitrations closed:
 - PRC-018-013 – discipline. Status: Settled June 4, 2019.
 - PRC-018-043 – job abandonment. Status: Settled April 30, 2019.
 - Scheduled arbitrations:
 - PRC-017-042 – union grieving company’s closure of the Plastic Shop at PFP. Status: Arbitration rescheduled for September 19, 2019.
 - PRC-018-001 – union claiming jurisdiction of demobilization activities on Davis-Bacon work site. Status: Arbitration was rescheduled for February 5, 2020; 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-018-021 – 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.
 - The following grievance has been requested by HAMTC to move to arbitration but pending arbitration date:
 - PRC-018-011 and PRC-018-026 (Tumbleweed Removal).
 - PRC-019-003 and PRC-019-004 (Discipline – 30-day suspension).
- **Interface Management:**
 - o Institutionalized a CHPRC Resource Management Policy (PRC-POL-MS-54402) and corresponding Resource Allocation Process procedure (PRC-PRO-MS-54385).
 - o Developed and presented to senior management a J.3 Motor Carrier analysis, which documents the opportunities and challenges related to CHPRC self-performing teamster craft related duties.
 - o Completed review/input on the FY2019 annual Infrastructure Services and Alignment Plan.
 - o Completed Preliminary Annual FY2020 MSA Forecast of Usage Based Services.
 - o Received the updated J.13, Structures, and J.14, Waste Site, contract tables from RL in PRC Contract Modification 697, May 2019.
 - o Completed joint effort with MSA and Washington River Protection Solutions to address recent RL/ORP concerns related to biological control vector management. Recovery actions, including LL at the 12B Burial Ground site and additional reporting/analysis commitments, were presented to RL/ORP as highlights of continued biological vector control improvements.
 - o Facilitated equipment loan/transfer activities with PNNL regarding the Ammonium Injection Trailer. PNNL had requested the trailer to support test activities at another government site.
 - o Developed or completed review/updates of five Interface Agreements, including a new Administrative Interface Agreement associated with the DOE directed all exempt employee Random Drug Testing Program.
- **Strategic Management:**
 - o Completed Project Evaluation Matrix revision (aka Risk Matrix)
 - o Finalized CHPRC/AMRP FY2020 Integrated Priority List (IPL)
 - o Developing PRC vs. Central Plateau Cleanup Contract (CPCC) crosswalks
 - J-12/13 vs. J-13/14 (structures and waste sites).
 - J-3 – Hanford Site services and interface requirements.
 - CPCC Task Order WBS elements vs. PRC existing and planned WBS.
 - o Supported annual review of Hanford Site Interface Management Plan – MSC-IMP-00001.
 - o Performed review of all FY2020-2022 WBS dictionaries.

Project Technical Services (PTS)

- Training and Procedures
 - o Completed all computer-based training (CBT) course conversions to a software configuration compatible with the new Learning Management System. Nearly 100 CBTs were revised over the course of seven months to reach this goal.
 - o Developed and implemented the Conduct of Work CBT course for all personnel who support CHPRC projects. This course is the initial introduction to Conduct of Work concepts for many members of the workforce and therefore is imperative to our operation.
 - o Teamed with subject matter experts (SMEs) to develop and implement a new Labor Relations qualification card to help ensure all Labor Relations field representatives receive a similar level of knowledge before performing the job.
 - o Worked with program personnel to develop and implement a new Employee Relations Specialist qualification card and study guide to help ensure a consistent minimum level of knowledge for HR field representatives.
 - o Teamed with project and program SMEs to implement a training information bulletin describing WAC 173-303, for CHPRC employees who generate, package, label, mark, store, and/or inspect dangerous waste. This training information bulletin provides an overview of the changes to program-level processes.

- o Issued a training information bulletin for PRC electrical workers and their supervisors advising them on the changes associated with the Arc Flash Boundary Label implemented in DOE-0359, *Hanford Site Electrical Safety Program (HSESP)*, Revision 4-2.
- o Completed and released the revision of the PCard and PCard Administrator CBT courses, which completes the annual training material updates.
- o Initiated a training needs analysis to document the decision to remove Lock and Tag Controlling Organization Authority from the Release Authority qualification requirements. As a result, the role for Non-Facility Release Authority and associated training materials will no longer be needed.
- o Issued revision to CHPRC General Employee Training changes for SME review and approval. Changes include Conflicts of Interest form, Fraud Risk Management commitment, and drug screening program enhancement. Revised procedure PRC-PRO-HR-033, *Employee Discipline*, to improve the process. Changes included adding detailed steps for the conduct of a Discipline Review Board meeting, and proving a list of responsibilities for the HR Manager and Discipline Review Board Members.
- o Identified and assigned the list of students who need the newly developed Conduct of Operations Training Course Number 600632 to the first group of classroom sessions scheduled to occur between the months of July and August. Additional sessions will be arranged as instructor schedules become available. Efforts are being made to spread training out to reduce the impact on the operating organizations.
- o Issued Fire Prevention Permit Coordination GAP Training Course Number 600595 as an interim measure to allow facility operations management to perform fire permit duties in accordance with written procedures.
- Operations Program
 - o Completed fieldwork and interviews to support the Hazardous Energy Control Corrective Action Plan Effectiveness Review, one of the actions from the Hazardous Energy Control Corrective Action Plan submitted to RL.
 - o Presented Conduct of Operations Safety Management Program Review to the Executive Safety Review Board. The program was reported as Green. The focus for next year will be the Conduct of Work rollout and preparations for transition.
 - o Facilitated meeting with all projects regarding new resource allocation process procedure. The session provided an opportunity for all projects to understand the purpose of the new procedure and help ensure that the process that can be implemented consistently across all projects.
 - o Supported and continuing to support CPCC transition for conduct of operations and conduct of maintenance.
 - o Presented Work Control Safety Management Program to the Executive Safety Review Board (ESRB).
 - o Performed review of PRC-PRO-MN-40356, *Tri-Carb Liquid Scintillation Analyzer (LSA) Calibration Procedure*, with technical authority.
 - o Participated in conduct of operations pilot class.
 - o Completed third round of system isolation training.
 - o Presented Work Management Overview and FWS classroom training.
 - o Finalized crystal reports for periodic maintenance and work package backlog in support of the contract pre-transition planning team.
 - o Supported radiological control program personnel in resolving issues/concerns with the Management Observation Program and use by radiological control personnel for program improvements.
 - o Supported special Facility Managers Forum meeting to review recent hazardous energy control events and to formulate strategy for sharing of LL, common issues, and issue resolutions.
 - o Participated in tabletop review of Conduct of Operations training for the Conduct of Work initiative.

- o Attended the Pilot class for new Conduct of Operations Training and provided feedback for potential enhancements.
- o Updated the Controlling Organization Administrator Qualification Card to add missing references in DOE-0336 and to update the section on Electrical Risk Assessments.
- o Provided a program review/update for the Work Control Safety Management Program to the ESRB.
- Readiness and Preparedness
 - o Completed second quarter WSA PTS-2019-WSA-21621 on Key Activities for the Emergency Preparedness Program, emergency response equipment, command center adequacy, no issues were noted.
 - o Building Emergency Plan/Facility Response Plan (FRP) Permit Update Project – Completed six revisions, one FRP revision, and one new FRP to comply with WAC 173-303-201(14)(b) to support implementation on April 28, 2019.
 - o Participated in the site wide continuity of operations exercise, demonstrating the ability of multiple organizations to respond to a site-wide emergency condition.
 - o Supported the site wide emergency action drill ran by MSA for 100 and 200 Areas.
 - o Received preliminary results of RL triennial assessment of CHPRC Emergency Preparedness program that resulted in the identification of 14 issues, the majority of which fit into known challenges with the EP Program at CHPRC. A formal assessment report is expected in July.
 - o Supported the implementation of four full-up or limited scope evaluated drills, three evaluated table top drills, an operational drill, and a site exercise. The broad-based support of the EP Program staff for these drills is re-establishing a healthy Facility Emergency Response Organization posture in the projects.
 - o Issued the revised Corrective Action Plan (CAP) to RL for the February 2018 exercise. The revised CAP addressed weaknesses in the initial CAP and realigned corrective actions to be commensurate with the current organization's needs. As EP staff currently on board were not present during that exercise, the primary focus on improvement was a review of LL from the exercise and an update to the Emergency Preparedness Qualification Cards to ensure appropriate understanding of scenario review group meetings.
 - o Issued the CAP to RL for the September 2018 exercise addressing remedial actions to improve facility emergency response posture and broader recognition of ensuring adequate number of response personnel are qualified and proficient to support event response.

Communications:

- Communications supported RL in proactive and reactive media stories:
 - o EM Newsletter (April 2, 2019) – Students Visit Hanford Mock-up to Learn About STEM Career Opportunities.
 - o EM Newsletter (April 9, 2019) – EM Assistant Secretary Meets with Hanford Workers, Views Cleanup Progress.
 - o KVEW-TV (April 9, 2019) – Demolition of Hanford's PFP to restart soon.
 - o EM Newsletter (May 7, 2019) Efficiencies Drive Continued Success of Hanford Groundwater Treatment.
 - o EM Newsletter (May 14, 2019) – Upgraded Modeling System Supports Long-Term Hanford Cleanup Decisions.
 - o EM Newsletter (May 28, 2019) – Cell Cleanout, Saw Testing Mark Progress in Hanford Project.
 - o EM Newsletter (June 11, 2019) – Hanford Plutonium Finishing Plant Demolition Making Significant Progress.
- Communications supported RL in the development of social media posts, featuring the following:
 - o 324 Building progress.
 - o S&GRP progress.
 - o Removal of two miles of old insulated steam lines.

- o More than 5,300 tons of PFP debris disposed of at ERDF.
- o Upgrades at P&T facilities.
- o Partners N Pals event.
- o Chiawana High School students visit 324 Mockup.
- o 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	0.3	0.0	0.0%	(0.2)	-117.8%
Engineering	0.1	0.1	0.1	0.0	0.0%	0.0	33.6%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	0.1	49.2%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	24.8%
Communications & Outreach	0.1	0.1	0.1	0.0	0.0%	0.0	19.4%
Safety, Health, Security, and Quality	1.2	1.2	1.1	0.0	0.0%	0.1	9.3%
Environmental Program and Strategic Planning	0.4	0.4	0.3	0.0	0.0%	0.0	11.2%
Business Services	2.6	2.6	2.6	0.0	0.0%	(0.0)	-1.3%
Prime Contract and Project Integration	0.6	0.6	0.5	0.0	0.0%	0.0	7.3%
Resource Management and Strategic Integration	0.5	0.5	0.5	0.0	0.0%	(0.0)	-1.9%
Project Technical Services	0.5	0.5	0.5	0.0	0.0%	0.0	4.0%
Indirect WBS 000 Total	6.5	6.5	6.3	0.0	0.0%	0.2	2.4%

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: (+\$0.2M/+2.4%)

The variance is within reporting thresholds.

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

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)
Office of the President	1.5	1.5	1.8	0.0	0.0%	(0.3)	-23.2%	2.0
Engineering	1.4	1.4	1.0	0.0	0.0%	0.4	26.2%	1.9
Internal Audit	1.2	1.2	0.7	0.0	0.0%	0.4	37.3%	1.6
General Counsel	1.2	1.2	0.9	0.0	0.0%	0.3	24.7%	1.6
Communications & Outreach	0.8	0.8	0.8	0.0	0.0%	0.1	9.0%	1.2
Safety, Health, Security and Quality	11.6	11.6	10.7	0.0	0.0%	0.9	7.6%	16.1
Environmental Program and Strategic Planning	3.4	3.4	3.2	0.0	0.0%	0.3	7.3%	4.8
Business Services	24.5	24.5	23.2	0.0	0.0%	1.3	5.2%	33.7
Prime Contract and Project Integration	5.6	5.6	5.1	0.0	0.0%	0.5	9.1%	7.7
Resource Management and Strategic Integration	5.1	5.1	4.4	0.0	0.0%	0.6	12.5%	7.0
Project Technical Services	4.8	4.8	4.7	0.0	0.0%	0.1	2.2%	6.6
Indirect WBS 000 Total	60.9	60.9	56.5	0.0	0.0%	4.5	7.3%	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: (+\$4.5M/+7.3%)

The positive cost variance is attributable to less labor cost than budgeted due to open vacancies, project needs, and 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	FYTD	FYTD	FY 2019	FY 2019	FY 2019
	BCWS	Actual	Variance (O)/U	BCWS	Forecast	Variance (O)/U
General & Administrative (G&A)	60.9	56.5	4.5	84.1	78.3	5.8
Office of the President	1.5	1.8	(0.3)	2.0	2.5	(0.5)
Engineering	1.4	1.0	0.4	1.9	1.3	0.5
Internal Audit	1.2	0.7	0.4	1.6	1.0	0.6
General Counsel	1.2	0.9	0.3	1.6	1.3	0.4
Communications	0.8	0.8	0.1	1.2	1.1	0.1
Safety, Health, Security and Quality	11.6	10.7	0.9	16.1	14.5	1.5
Env. Program & Strategic Planning	3.4	3.2	0.3	4.8	4.5	0.3
Business Services	24.5	23.2	1.3	33.7	32.4	1.4
Prime Contract and Project Integration	5.6	5.1	0.5	7.7	6.9	0.8
Resource Mgmt & Strategic Intg	5.1	4.4	0.6	7.0	6.4	0.6
Project Technical Services	4.8	4.7	0.1	6.6	6.4	0.2

FY 2019		
G&A Distribution	(56.8)	(80.3)
Passback	2.5	2.5
G&A Liquidation (Over)/Under	2.2	0.6

Liquidation Analysis

For June (after a January passback of \$2.5 million), the application of the G&A rate has an under liquidated total to date G&A cost by \$2.2 million. The FY2019 year-end projected under liquidation of \$0.6 million reflected in the fiscal year spend forecast reflects a projected decrease in G&A costs as well as an increase to the G&A base.

Consistent with the 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

June 2019
CHPRC-2019-06, 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

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress is on hold for work associated with critical decision (CD)-4 closure to remove the final glovebox from the 234-5Z Building during demolition. The remaining glovebox (HA-46) has been staged until the area of the 234-5Z Building 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).

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
Glovebox/Hood Removed	-	0	174	173
COMPLETE KPP Rooms/Areas Ready for Demo	-	0	72	72

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

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title 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 June .				
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 June .				
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 June .				
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 June .				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in June .				

CRITICAL PATH ANALYSIS

The PFP critical path schedule begins with completion of demolition of core stabilization zone (CSZ) 3 and first bay A/C line duct level, followed by the remaining sections of Zones 4, 5, 6 and 7, with the exception of the drain line. Remote Mechanical C process line demolition, Remote Mechanical A process line demolition, and loadout of glovebox HA-46, in parallel with completion of the basement of 234-5Z demolition, will begin after RL concurrence of the management assessment (MA) to resume high-risk demolition. This leads to CD-4 declaration and confirmation of the completion worksheet. The CD-4 closeout completion milestone is scheduled for January 8, 2020.

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	01/08/2020	The CAP 1 project forecasted completion date is January 8, 2020. A three-week slip from the previous month was due to high wind impacts and a deliberate approach used on demolition and load-out activities.

*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

June 2019
CHPRC-2019-06, 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 / 05 / 27										
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23										
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18										
5. CONTRACT DATA																
a. QUANTITY 1	b. NEGOTIATED COST 330,987	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 9,878	e. TARGET PRICE 340,865	f. ESTIMATED PRICE 344,856	g. CONTRACT CEILING 340,865	h. ESTIMATED CONTRACT CEILING 344,856	i. DATE OF OTB/OTS (YYYYMMDD)								
6. ESTIMATED COST AT COMPLETION				7. AUTHORIZED CONTRACTOR REPRESENTATIVE												
MANAGEMENT ESTIMATE AT COMPLETION (1)		CONTRACT BUDGET BASE (2)		VARIANCE (3)		a. NAME (Last, First, Middle Initial) Underwood, Teresa		b. TITLE Prime Contract Compliance Manager								
a. BEST CASE 332,585						c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)								
b. WORST CASE 334,991																
c. MOST LIKELY 334,978		330,987		-3,991												
8. PERFORMANCE DATA																
CAPN.PBS Control Account.PARS 2 WBS (2)		CURRENT PERIOD				CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION			
ITEM (1)	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)						
RL-0011 Nuclear Mat Stab & Disp PFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RL_0011_C1.02 Maintain Safe & Compliant PFP	0	0	0	0	0	235,514	235,495	259,792	-19	-24,296	0	0	0	235,514	259,798	-24,283
RL_0011_C1.05 Disposition PFP Facility	0	0	0	0	0	11,990	11,990	12,477	0	-487	0	0	0	11,990	12,477	-487
RL_0011_C1.06 Project Management & Support	0	0	0	0	0	7,221	7,221	7,731	0	-510	0	0	0	7,221	7,731	-510
RL_0011_C1.90 Usage Based Services Distributions -PBS RL-11	0	0	0	0	0	19,399	19,399	19,253	0	147	0	0	0	19,399	19,253	147
RL_0011_C1.98 Ramp-up and transition	0	0	0	0	0	41,028	41,028	33,328	0	7,700	0	0	0	41,028	33,328	7,700
RL_0011_C1.99 PBS RL-11 UBS, G-n-A, Direct Distrib	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET																
e. SUBTOTAL	0	0	0	0	0	315,152	315,133	332,579	-19	-17,446	0	0	0	315,152	332,585	-17,433
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	332,585	-15,040

*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 / 05 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		ADJUSTMENTS			BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)				
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	280,005	-25,280	
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	332,585	-17,433	
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 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 / 05 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23	
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18	

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)												AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 JUL 2019 (4)	+2 AUG 2019 (5)	+3 SEPT 2019 (6)	+4 OCT 2019 (7)	+5 NOV 2019 (8)	+6 DEC 2019 (9)	JAN 2020 (10)	FEB 2020 (11)	MAR 2020 (12)	APR 2020 (13)	ATCOMPLETE (14)		
35 - Business Services	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project	0	15441	0	0	0	0	1	0	0	0	0	0	0	0	15442
g. TOTAL DIRECT	0	15458	0	0	0	1	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 CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME MPB - RL_0011_C1 - PFP D&D (ARRA/Base)			a. FROM (YYYYMMDD) 2019/05/27		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2019/06/23		
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:	0	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	332,585	-17,433	-5.5%	0	3.12				

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 Plutonium Finishing Plant (PFP) project baseline completion date is November 19, 2016. The current schedule reflects a completion date of January 8, 2020.

Cost Impact: Cost variance is not considered recoverable as there is only a small amount of scope remaining to complete the Key Performance Parameters (KPP).

Corrective Action:

None at this time

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

There was no change in the difference between the Contract Budget Base and the Total Allocated Budget on Format 3 for the month of June. The Total Allocated Budget (TAB) is based on the DOE-HQ approved DOE PBS RL-0011-C1 Project Execution Plan Appendix D. The Appendix D table established a total project value of \$330.9M, based on a mix of actuals to-date (through ~FY2014) and a to-go forecast for project completion. The total project value reflected in the DOE PEP exceeded the Contract Budget Base (CBB) reflected in Plateau Remediation Contract (PRC) due to negative cost performance through ~FY2014 against the PRC negotiated cost for the C1 project. DOE elected to not incorporate the total project value reflected in the DOE PEP into the PRC to maintain the negative cost variance reported by CHPRC. This created the continuing difference between the TAB and CBB which is currently ~\$13.4M.

- Schedule Margin Analysis: There is no schedule margin associated with the RL-011.C1 capital asset account.
- IMS Data dictionary Changes: None in the month of June.
- Forecast Schedule with No Baseline: None in the month of June.
- UB Balance: None in the month of June.
- Negative Actual Cost of Work Performed (ACWP): None in the month of June.
- Earned Actual Cost (EAC) Analysis: Best Case = \$332,585; Most Likely = \$334,978; 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 Budgeted Cost of Work Remaining 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.
- Negative Cost Variance (CV) > Variance at Completion (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.
- Management Reserve Transactions: None in the month of June.
- Freeze Period Changes: None in the month of June.
- Retroactive Changes: None in the month of June.
- Earned Value Types Changes: None in the month of June.

Prepared by: Eric Denton

7/15/2019

Approved by:

Date:

Appendix C.2

Capital Asset Project

RL-0011.C2 - Demolition of PFP Facilities



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

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The Plutonium Finishing Plant (PFP) team completed demolition of Core Stability Zones (CSZs) 2.3 and 2.5, including both stairwells and the elevator shafts, in the month of June. Demolition began on CSZ 3, and the demolition of tunnels 1, 2, 3 and 6 are 75 percent complete. Seventy-seven (77) containers of low-risk demolition debris were shipped to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal. Corrective actions resulting from the Management Assessment performed in May 2019 were identified, and 78 percent have been addressed.

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
COMPLETE Cold and Dark/Demo Ready activities for 234-5Z	-	-	1	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 the demolition and debris disposition of CSZs 2.3 and 2.5, including stairwells 1 and 2 and the elevator shaft.
- Shipped 77 containers of demolition debris to ERDF.
- Began demolition on CSZ 3 and tunnels 1, 2, 3 and 6.
- Completed the removal of the high-efficiency particulate air filters from the ion exchange exhausters units, and successfully aerosol tested unit 2. The ion exchange exhausters units will be used in high-risk demolition activities.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Unmitigated Risk Impacts	Assessment		Comments															
	Month	Trend																
RL-0011/WBS-011.OA																		
Explanation of major changes to the project monthly spotlight chart: Risk PFP-P2-002, Weather Impacts During 235-5Z Debris Disposition, was added as a FY2019 Risk Trigger.																		
Realized Risks (Risks that are currently impacting project cost/schedule)																		
No realized risks identified in June.																		
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																		
No critical risks identified in June.																		
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																		
No high risk threat values identified in June.																		
FY2019 Risk Triggers (Risk could be realized in FY2019)																		
PFP-P2-002: Weather Impacts During 235-5Z 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: \$6.5M, 20 days	 	Risk Event: Summer weather brings high temperatures that limit outside fieldwork. Additionally, when sustained wind speeds are greater than 30 mph or gusts are above 40 mph, work will be stopped pending radiological surveys to confirm that no contamination has spread beyond established boundaries. <table border="1" data-bbox="898 926 1568 972"> <thead> <tr> <th>Mitigation action (s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Move workforce to "tropical" shift schedule.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> Risk Action Assessment: Wind has impacted demolition progress. Surveys are conducted more efficiently resulting in less time to recover from wind events, allowing work to resume sooner following an event. The tropical shift allows work crews to make early morning zone entry to avoid heat impact.	Mitigation action (s)	FC Date	%	Move workforce to "tropical" shift schedule.	Complete	100									
Mitigation action (s)	FC Date	%																
Move workforce to "tropical" shift schedule.	Complete	100																
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 Trigger: During resumption of PFP demolition activities, an increase in stop works could result in delays. <table border="1" data-bbox="898 1199 1568 1339"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <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> </tbody> </table> Mitigation Assessment: No major changes in June. Increased communication and worker involvement to avoid confusion and concern in an effort to minimize stop works have continued; stop works may impact the project schedule going forward.	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 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																
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. <table border="1" data-bbox="898 1545 1568 1661"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Engage early with U.S. Department of Energy, Richland Operations Office (RL) to identify a path forward associated with the additional soil.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Collect and provide radiological mapping data to RL.</td> <td>TBD</td> <td>TBD</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in June. 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 determine that no additional soil disposition is required.	Mitigation action(s)	FC Date	%	Engage early with U.S. Department of Energy, Richland Operations Office (RL) to identify a path forward associated with the additional soil.	Complete	100	Collect and provide radiological mapping data to RL.	TBD	TBD						
Mitigation action(s)	FC Date	%																
Engage early with U.S. Department of Energy, Richland Operations Office (RL) to identify a path forward associated with the additional soil.	Complete	100																
Collect and provide radiological mapping data to RL.	TBD	TBD																
Unassigned Risks (Pending ownership of identified threats/opportunities)																		
No unassigned risks identified in June.																		

CRITICAL PATH ANALYSIS

The PFP critical path schedule begins with demolition completion of CSZ 3 and first bay A/C line duct level, followed by the remaining sections of Zones 4, 5, 6 and 7, except for the drain line. Remote Mechanical C and A process lines demolition and glovebox HA-46 loadout in parallel with the basement of 234-5Z demolition completion will begin after RL concurrence to resume high-risk demolition. The 234-5Z demolition is projected for completion by October 16, 2019. The 236-Z canyon demolition will resume with completion anticipated by December 18, 2019, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-083-00A – PFP Facility Transition and Selected Disposition Activities. Demolition completion will be followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities completing by mid-March 2020.

SCHEDULE MARGIN/MANAGEMENT RESERVE

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

CRITICAL DECISION MILESTONE STATUS

Number	Title	*Due Date	**Forecast Date	Status/ Comment
RL-011.C2	Completion of Demolition of all PFP Facilities	7/31/2020	3/5/2020	Demolition on 234-5Z progressing – 10-day slip from a deliberate approach to demolition and impacts from high winds.

*Due date reflects CD-4 due date with DOE contingency.

**Forecast date reflects CD-4 completion date (does not include 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

June 2019
CHPRC-2019-06, Rev. 0
Contract DE-AC07-08RL14788
Deliverable C.3.1.3.1 - 1

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

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

FORM APPROVED

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 / 05 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23	
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18	

WBS.Resp Org Group	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		ADJUSTMENTS			BUDGETED	ESTIMATED	VARIANCE	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	(14)	(15)	(16)	
3B - PFP Closure Project	4,934	1,258	3,969	-3,676	-2,711	104,538	91,810	130,651	-12,728	-38,842	0	0	0	125,742	164,667	-38,924	
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)	4,934	1,258	3,969	-3,676	-2,711	104,538	91,810	130,651	-12,728	-38,842	0	0	0	125,742	164,667	-38,924	
f. MANAGEMENT RESERVE														13,535			
g. TOTAL	4,934	1,258	3,969	-3,676	-2,711	104,538	91,810	130,651	-12,728	-38,842	0	0	0	139,278			

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT																	Form Approved	
FORMAT 3 - BASELINE																	OMB No. 0704-0188	
DOLLARS IN THOUSANDS																		
1. CONTRACTOR CH2M HILL Plateau Remediation Company			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:				3. PROGRAM RL_0011_C2 PFP Demolition Capital Asset Project a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009				4. REPORT PERIOD a. FROM: 2019/05/27 b. TO: 2019/06/23							
5. CONTRACT DATA																		
a. ORIGINAL NEGOTIATED COST 51,683			b. NEGOTIATED CONTRACT CHANGE \$10,101		c. CURRENT NEGOTIATED COST (A + B) \$61,784		d. ESTIMATED COST AUTH UNPRICED WORK \$70,435		e. CONTRACT BUDGET BASE (C + D) \$132,220		f. TOTAL ALLOCATED BUDGET \$139,277		g. DIFFERENCE (E - F) (\$7,058)					
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2019		k. CONT COMPLETION DATE 9/30/2019				l. EST COMPLETION DATE 9/30/2019							
6. PERFORMANCE DATA																		
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)								UNDISTRIB BUDGET (18)	TOTAL BUDGET (19)
			+1 Jul-19 (4)	+2 Aug-19 (5)	+3 Sep-19 (6)	+4 Oct-19 (7)	+5 Nov-19 (8)	+6 Dec-19 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	FY19 (16)	FY20 (17)		
a. PM BASELINE (BEGIN OF PERIOD)	99,604	4,934	3,035	5,161	5,689	4,260	3,005	53	0	0	6,090	29,182	19,407	628	63,116	7,319	0	125,742
b. BASELINE CHANGES AUTH DURING REPORT PERIOD None at this time.															0	0		0
c. PM BASELINE (END OF PERIOD)	104,538	4,934	3,035	5,161	5,689	4,260	3,005	53	0	0	6,090	29,182	19,407	628	63,116	7,319	0	125,742
7. MANAGEMENT RESERVE																	13,535	
8. TOTAL																	139,277	

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 / 05 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2019 / 06 / 23	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)												AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 JUL 2019 (4)	+2 AUG 2019 (5)	+3 SEPT 2019 (6)	+4 OCT 2019 (7)	+5 NOV 2019 (8)	+6 DEC 2019 (9)	JAN 2020 (10)	FEB 2020 (11)	MAR 2020 (12)	APR 2020 (13)	ATCOMPLETE (14)		
3B - PFP Closure Project	157	3596	161	161	161	144	165	163	155	80	1	0	0	4787	
g. TOTAL DIRECT	157	3596	161	161	161	144	165	163	155	80	1	0	0	4787	

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) 2019/05/27			
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788			b. PHASE			b. TO (YYYYMMDD) 2019/06/23			
	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:		4,934.0	1,257.9	3,969.1	-3,676.1	-74.5%	-2,711.2	-215.5%	0.25	0.32
Cumulative:		104,537.9	91,809.7	130,651.4	-12,728.2	-12.2%	-38,841.7	-42.3%	0.88	0.70
		BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:		125,742.1	164,666.6	-38,924.5	-31.0%	0	1.00			
Explanation of Variance/Description of Problem:										
Current Month:										
Schedule Variance: The Current Month (CM) unfavorable schedule variance is primarily attributed to the project's deliberate approach to complete 235-Z low-risk demolition and load-out activities and impacts from high winds.										
Cost Variance: The CM unfavorable cost variance is primarily attributed to the accrual of labor costs and lagging demolition and debris load-out activities.										
Cumulative to Date:										
Schedule Variance: The cumulative schedule variance is due to delayed completion of low risk work scope due to implementation of revised approach and a deliberate approach to demolition activities.										
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.										
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 December 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):										
There was no change in the difference between the Contract Budget Base and the Total Allocated Budget on Format 3 for the month of June. The current negative delta is due to the request from PRC RL Contracting Officer (CO), documented in Correspondence No.1704418A, to implement a \$7.1 million drawdown for contingency in BCR-011C-17-013R0. The RL CO has not incorporated the directed \$7.1 million contingency drawdown into the PMB CBB, resulting in the negative delta.										
The following items are addressed, as applicable:										
1. Schedule Margin Analysis: No change in the month of June										
2. IMS Data dictionary Changes: No change in the month of June										
3. Forecast Schedule with No Baseline: No change in the month of June										
4. UB Balance: No change in the month of June										
5. Negative Actual Cost of Work Performed (ACWP): No change in the month of June										
6. Earned Actual Cost (EAC) Analysis: Best Case = \$164,667; Most Likely = \$178,202; Worst Case = \$178,571. 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 June										
8. Management Reserve Transactions: No change in the month of June										
9. Freeze Period Changes: No change in the month of June										
10. Retroactive Changes: No change in the month of June										
11. Earned Value Type Changes: No change in the month of June										
Prepared by: Jessica Mares			Date: 07/16/19			Approved by:			Date:	