

Monthly Performance Report

May 2017

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

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



**P.O. Box 1600
Richland, Washington 99352**

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APPROVED

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Release Approval

Date

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L. Ty Blackford
President and Chief
Executive Officer

Monthly Performance Report

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

May 2017
CHPRC-2017-05, Revision 0

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EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company (CHPRC) advanced cleanup throughout the Hanford site during the month of May. Major accomplishments included:

- **Plutonium Finishing Plant (PFP) Closure Project:** Workers progressed demolition of the Plutonium Reclamation Facility (PRF) to allow the initiation of the removal of the gallery gloveboxes on the exterior of the PRF canyon. Only one large glovebox remains (HC-7C) in the 234-5Z facility that requires removal prior to initiation of demolition.
- **Soil and Groundwater Remediation Project (S&GRP):** Re-started the KW Pump & Treat system after completing an 11-month rebound study. Workers completed drilling all 67 wells for the uranium sequestration project in the 300 Area.
- **Waste and Fuels Management Project (W&FMP):** Crews at the Waste Encapsulation and Storage Facility (WESF) conducted closeout activities from the grouting effort, including installing steel plates over the fixed contamination area at the truck port entrance and completing removal of waste from the WESF canyon.
- **K Basins Operations and Remediation Project:** K Basin Preoperational Acceptance Testing was initiated and is currently 10 percent complete. Documented Safety Analysis (DSA) page changes have been submitted to support integrated testing with basin water.
- **618-10 Burial Ground Waste Site:** Workers completed the last container removal and remediated the final segment of 13 steel vertical pipe units. Crews continue 316-4 Waste Site soil excavation and are over 90 percent complete.
- **324 Building Remediation Project:** Crews conducted airlock cleanout work, sorting and staging debris. The project awarded the subcontract for the fabrication of the mechanism to transfer waste from B Cell into the airlock, which is the last of the three major system components subcontracts to be awarded.



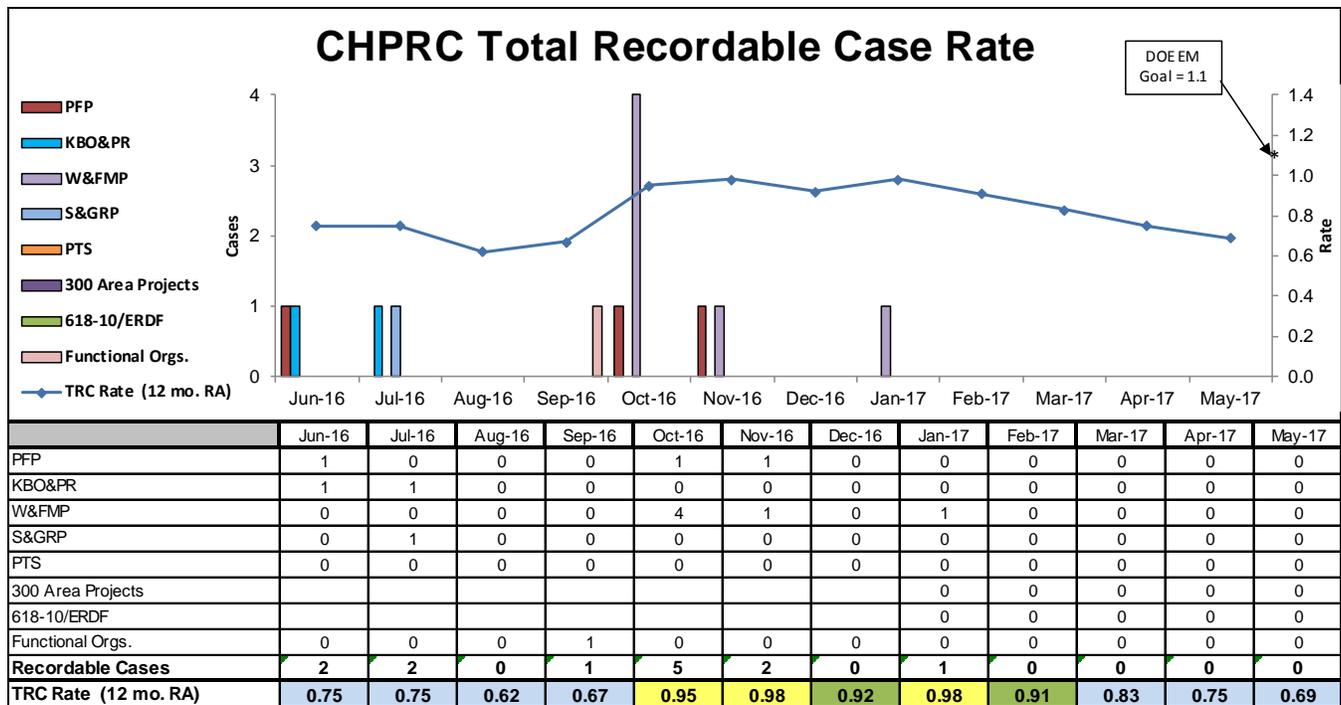
An aerial view in May of the Plutonium Reclamation Facility demolition.

- The President's Zero Accident Council (PZAC) meeting for May was hosted by Project Technical Services. The three main ideas were:
 - The Heat is On.
 - Here Comes the Sun.
 - Hot, Hot, Hot.
- Five "Thinking Target Zero" (TTZ) bulletins were published to convey important occupational, safety, health, and environmental messages:
 - Summer Pests.
 - VPP Community Outreach.
 - Heat Stress + Hydration.
 - Environmental Management System (EMS) Objectives and Targets.
 - Injury Prevention.
- Two Special Safety Bulletin was published in May:
 - Radiological boundaries – entry/exit requirements.
 - Chemical cartridge separations.
- *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
 - Six Lessons Learned:
 - Mine Safety & Health Administration--Fatality of Truck Driver Engulfed by Sand.
 - Hazardous waste placed in municipal trash.
 - Facilities driver struck co-worker while backing-up truck.
 - Check Cords Before Disconnecting and Connecting.
 - Oak Ridge National Laboratory - Dropped Waste Container.
 - Carpenter falls from 60 feet from Bridge Concrete Form.
 - Weekly ethics moments.
 - Vehicle incidents.
 - Conduct of work focus topic.
 - Watch for wildlife while driving.
 - Personal medical supplies.
 - 360 degree vehicle inspections.
 - Site lockout/tagout (LOTO) webpage update.
 - Electrical safety month.
 - 2017 Summer Safety.
 - Summer travel season.
 - Household hazardous waste.
 - Welcome back—worker safety refocus.
 - Electric shock drowning.
- The *Kudos Corner* recognized individuals and teams who made a significant contribution to safety at work, home or play:
 - Kudos to the 30 CHPRC volunteers who safely worked more than 100 hours on April 21, 2017, on three Habit for Humanity houses in Pasco.
 - Kudos to the Central Waste Complex (CWC) team who upgraded environmental labels on Standard Waste Boxes stored at the CWC. The team took it upon themselves to check/verify multiple requirements for labeling for the Nuclear Criticality Safety.

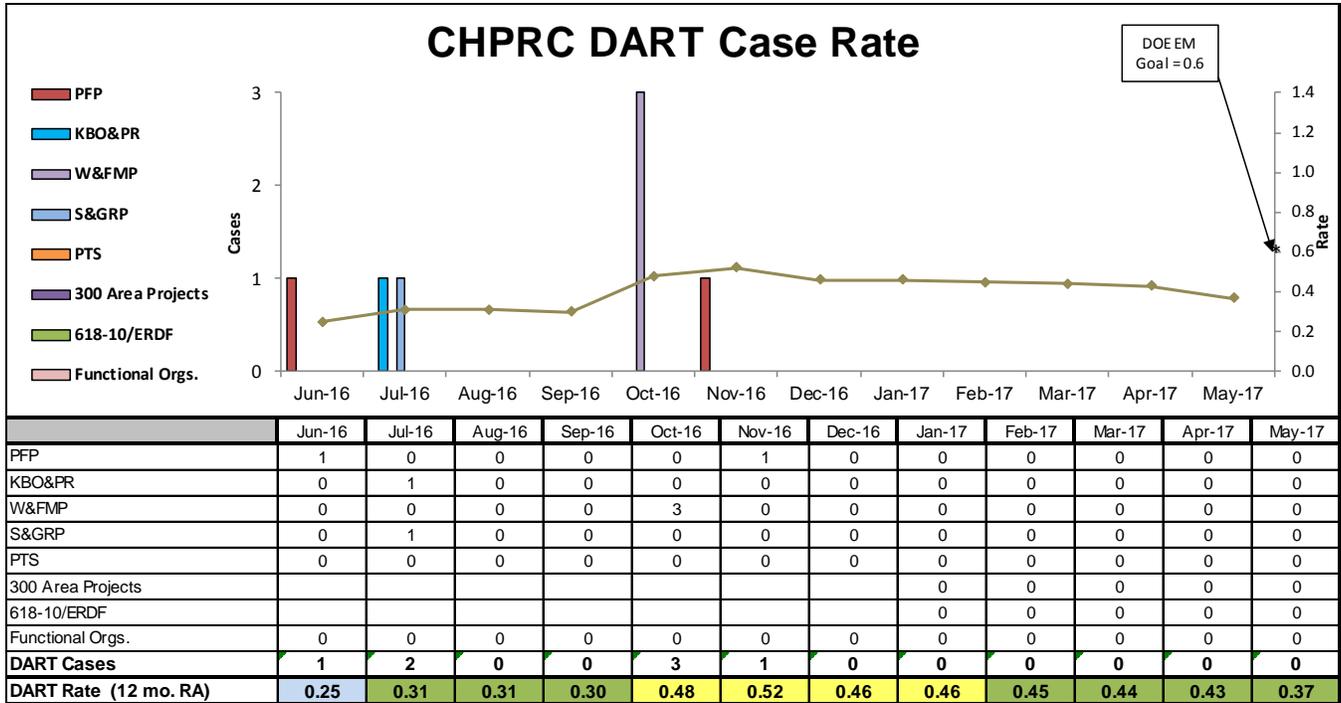
- o Kudos to a radiation control technician, a nuclear chemical operator and a millwright from CPS&M for discovering the partial collapse of the tunnel during surveillance. Their attentiveness and questioning attitude in the performance of their work was key to identifying this potentially hazardous situation.
- o Kudos to all employees who worked day and night shifts in the Emergency Operations Center during the PUREX event.
- o Kudos to the Respiratory Protection Tracking System Team who earned the Innovation Award at the Voluntary Protection Programs Participants Association (VPPPA) Region X Northwest Safety & Health Summit in Spokane last week.

TARGET ZERO PERFORMANCE

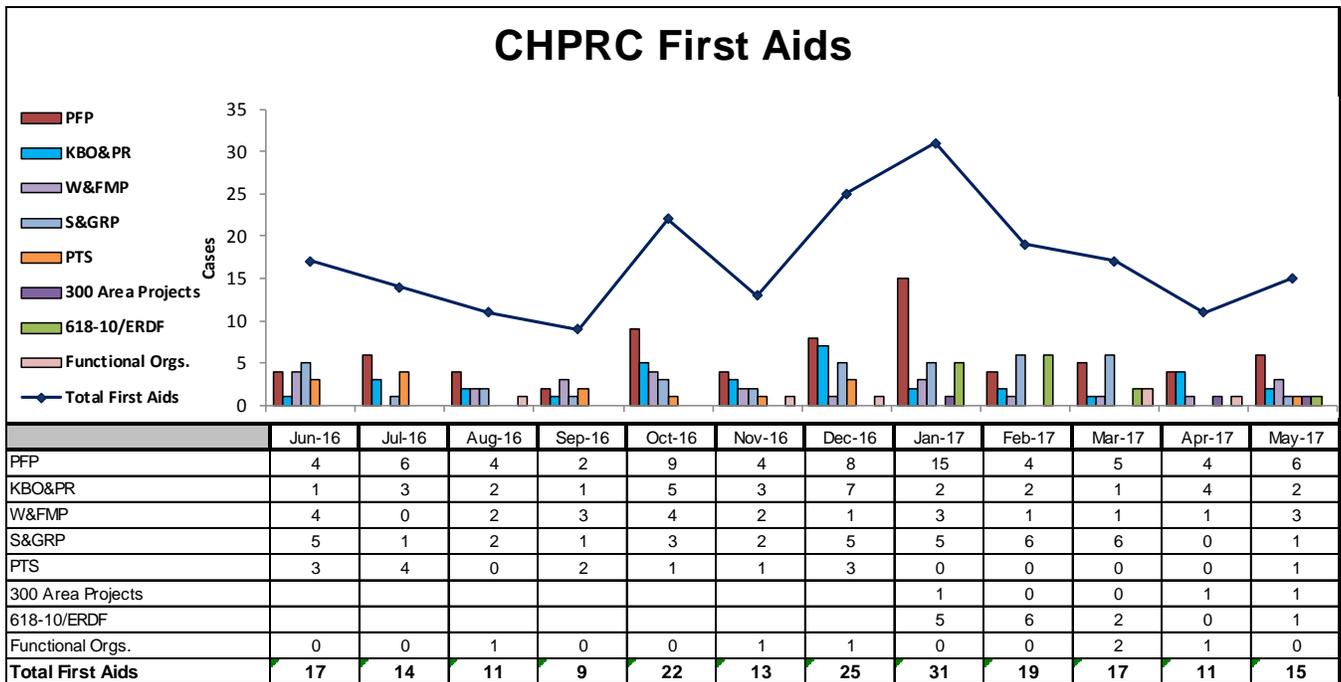
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.69 is based on a total of 13 Recordable injuries. There were no Recordable cases for May.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.37 is based upon a total of seven Days Away cases. There were no DART cases in May.



First Aid Case Summary: CHPRC reported 15 first aid cases in May. The contributors were seven sprains/strains/pains, three abrasions/bruises/contusions, three foreign bodies/irritation in the eye, one insect bite and one misc. (burns, rashes, repetitive motion, etc.) injury.

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 (PTS)

- Refer to the Appendix B section of this report for specific overhead support and Sections A through G, as well as Appendix C of this report for specific project support.

MAJOR ISSUES

Issue:

Unusually severe weather has caused negative schedule impacts to programmatic and performance measure due dates and increased costs.

Corrective Action:

- Evaluate potential workarounds to mitigate impacts.
- Submit notice to DOE Richland Operations Office (RL) for excusable delays related to unusually severe weather conditions.
- Assess current and future impacts of these disruptions to schedule and cost, and submit Request for Equitable Adjustment (REA) to RL.

Status:

- Submitted general notice to RL on January 24, 2017, (CHPRC-1700206 – *Request for Excusable Delay Due to Unusually Severe Weather*).
- Submitted Performance Measure (PM) specific request for Excusable Delay for *Weather Delay Impacts to PM-30-4-17, Complete Well Drilling of Six Wells by March 31, 2017*, on March 30, 2017. CHPRC requested the due date be adjusted by 15 working days (4x10 schedule), from March 31, 2017, to April 26, 2017. Additionally, CHPRC requested a PRC cost adjustment of \$124,800 to cover the additional subcontract cost caused by the excusable delay.
- Submitted PM specific request for weather impacts to *PM-40-2-17, Complete REDOX ROOF, DUE July 31, 2017*, and requesting 11 working days relief to the due date.
- Efforts to quantify schedule and cost impacts for PFP combined weather delay and additional asbestos are continuing.

Issue:

Significant Contract Change Management is ongoing and must be resolved to retain Plateau Remediation Contract (PRC) alignment for fiscal year (FY) 2017/FY2018.

- As of May month end, there was a backlog of 42 undefinitized Change Proposals (CPs) and responses to Requests for Proposals (RFPs) – totaling approximately \$299 million in net value (RCCC scope, WA-1 Characterization, and other Change Orders valued at approximately \$347 million offset by Management of Cesium and Strontium Capsules Capital Asset (MCSC) Project and NDA of Repackaged Remote Handled/Large Box Suspect TRU Waste deduct proposals valued at about \$48 million for work to be completed outside CHPRC period of performance).

Corrective Action:

- Work with RL to reach agreement on PRC FY2017/FY2018 alignment and support RL evaluation and determination of the disposition of undefinitized CHPRC CPs/REAs.

Status:

- CHPRC continues to discuss proposed alignment strategy with RL.
- Three Truthful Cost or Pricing Data (TCoPD) updates were submitted to RL (CP 041 306 1596 - 618-10 Burial Ground, CP 041 306 1600 - 316-4 Waste Site, and CP 041 306 1610 - 600-63 Waste Site) were submitted in May. CHPRC continues to respond to RL Requests for Information and TCoPD submittal requests in a timely manner to provide RL with current information to enable them to negotiate and definitize open changes.

Issue:

Resource Availability/Staffing Needs – schedule delays and emerging issues at PFP have resulted in the need for unplanned resources and delayed planned roll-off of PFP staff. Delay has impacted workforce restructuring planning and may impact other project's ability to perform other activities as planned due to unavailability of staff assumed to be released by PFP.

Corrective Action:

- Update staffing analysis to evaluate options to support work priorities and workforce restructuring.
- Hire short-term craft personnel to support PFP and other project needs.

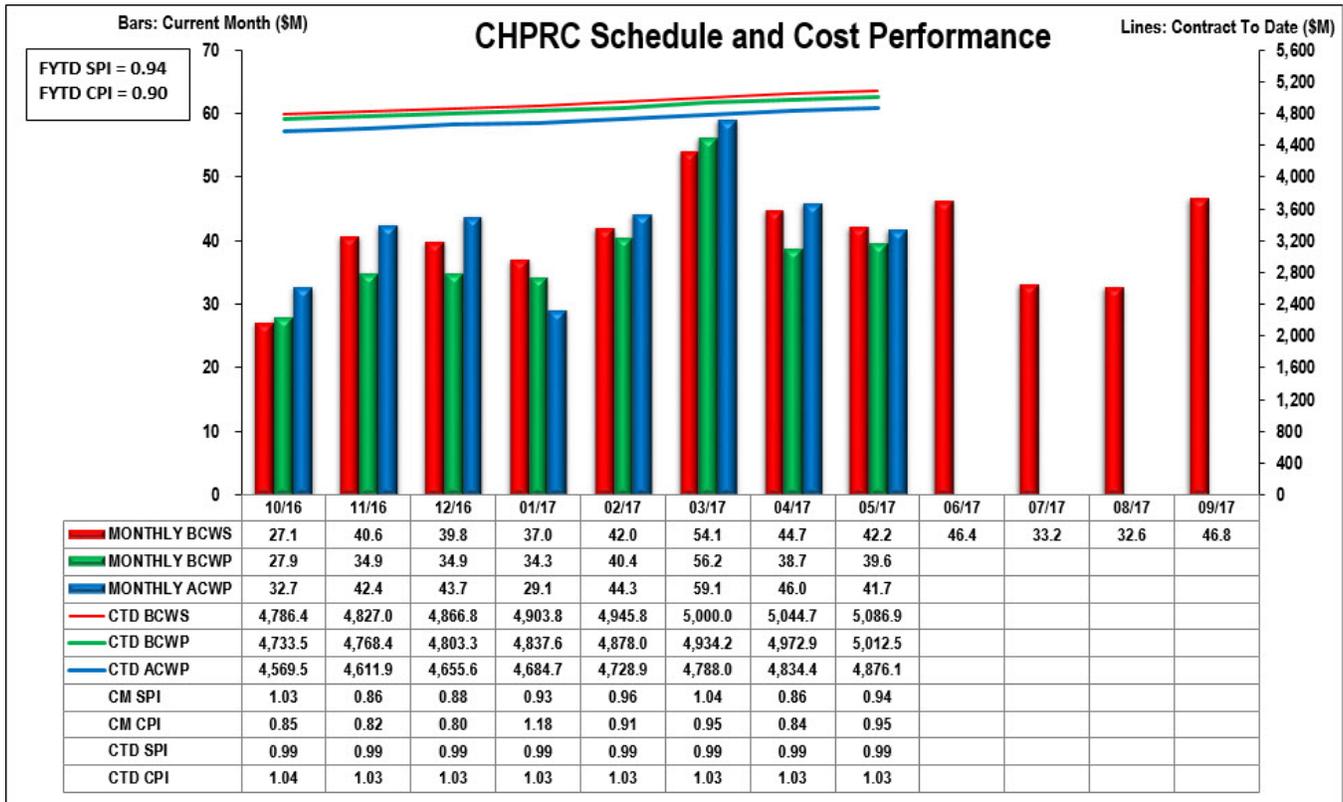
Status:

- Updated staffing analysis addressing the delay in the PFP planned roll-off and other project staffing needs has been completed.
- Moving ahead with workforce restructuring and continuing to work to minimize impacts to other projects.
- This issue is being managed with Bi-weekly staffing meetings and joint sessions with RL to develop an Integrated Priority List. This will no longer be reported as a major issue after this reporting period.

Projects

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

EARNED VALUE MANAGEMENT



	\$M					\$M					\$M		
	Current Period					Contract to Date					Contract Period		
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance		BAC	EAC	Variance
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost			
RL-0011 - Nuclear Materials Stab & Disp PFP	0.2	2.3	10.2	2.2	(7.9)	980.1	939.2	1024.9	(40.9)	(85.7)	980.5	1,069.4	(88.9)
RL-0012 - SNF Stabilization & Disposition	6.5	6.0	4.6	(0.6)	1.4	674.1	674.4	644.1	0.3	30.2	740.6	706.3	34.2
RL-0013 - Solid Waste Stab & Disposition	7.3	7.3	6.9	(0.1)	0.4	1156.5	1154.6	1079.7	(1.9)	74.9	1,345.6	1,297.7	47.9
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	14.1	9.7	8.4	(4.5)	1.3	1378.9	1348.1	1313.1	(30.8)	35.1	1,567.2	1,510.8	56.3
RL-0040 - Nuc Fac D&D - Remainder	2.2	2.1	3.0	(0.2)	(0.9)	440.6	435.1	406.1	(5.4)	29.0	484.3	457.5	26.8
RL-0041 - Nuc Fac D&D - RC Closure Project	11.5	12.2	8.4	0.6	3.7	433.2	437.6	389.0	4.5	48.7	554.7	495.8	58.9
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.2	(0.0)	0.0	23.5	23.5	19.3	(0.0)	4.2	26.5	23.9	2.6
Total	42.2	39.6	41.7	(2.6)	(2.1)	5,086.9	5,012.5	4,876.2	(74.4)	136.4	5,699.3	5,561.5	137.9

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

* In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

Performance Summary

CHPRC continues to track completion of the contract scope within budget and is currently projecting a Variance at Completion of \$137.9 million, with \$62.7 million of Management Reserve (MR), for a total positive variance of \$200.6 million. For May, the project was 6.1 percent behind schedule and 5.3 percent over planned cost. Contract to Date (CTD), the project was 1.5 percent behind schedule and 2.7 percent under planned cost.

The current month negative schedule variance is primarily due to project breakdown structure (PBS) RL-0030 delay of the 100-NR-2 Barrier maintenance and expansion activities, which were scheduled to start in FY2016 but were deferred due to funding limitations and pending resolution of cultural clearance items. Some cultural clearance and other planning activities are forecast to complete in FY2017, with fieldwork initiating in FY2018. Additionally, positive performance earned in prior periods (work acceleration) for 200-PO-1 NRDWL and 100-HR-3 optimization, and 200-UP-1 SE chrome plume characterization drilling campaigns, 100-HR-3 D&D, and 100-HR-3 well realignments, is returning to zero by the end of FY2017.

This is partially offset by PBS RL-0011s completion of historical BCWS associated with the 26-inch process vacuum removal, characterization, asbestos, drain lines, E3/E4 duct scope, trench grouting, and drain line remediation in 234-5Z, as well as sample and process vacuum system removal in 291-Z. Because all work is historical, the current schedule variance will be favorable going forward. Additionally, performance of behind schedule demolition work scope associated with the demolition of 236-Z and 242-Z also contributes to this positive variance.

The current month negative cost variance is primarily due to PBS RL-0011 delay in completion of the PFP Project to achieve slab on grade. The delay is causing needed extensions of both Minimum Safe, Maintenance, and D&D project management resources, without BCWS, to support the remaining D&D work scope until the facility becomes ready for demolition. In addition, asbestos abatement, E4 duct removal, and process vacuum removal are all requiring more time and additional resources to complete work. Additional resources (i.e., pipefitters, electricians, insulators, Radiological Control Technicians) have also been hired temporarily to attempt to recover schedule. Additional activities have been identified that require removal of approximately an additional 10,000 feet of asbestos that was not visible on any plant drawings when the baseline was developed, further delaying the demolition ready activities. Due to delays in ready-for-demo activities, resources supporting waste processing activities that were planned to be completed in FY2016 are continuing to charge for support of waste loadout, processing, and shipping. Additional unplanned shipping materials (waste shipping containers (TL-1800s, SLB2s, IP-1 bags, etc.)) were also required to support waste load-out activities. Unplanned shipments of drums to Perma-Fix Northwest also contributed to the unfavorable variance. Continuation of quarterly stipend certification payments is also contributing to this variance. In addition, due to the historical (December 2015) radiological issues resulting in compensatory measures that have been implemented at PFP, additional radiological and industrial hygiene resources have been assigned to support the PFP Project until the slab-on-grade milestone is met.

This is partially offset by PBS RL-0041 project management and support accounts for 618-10 Burial Ground experienced significant underruns due to efficient use of resource sharing across the complex and reduced material usage. Additionally, excavation efficiencies at the 316-4 Waste Site reduced the total volume of soil to be removed which resulted in significant progress with minimal costs.

FUNDING ANALYSIS

FY2017 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2017		Variance
		Projected Funding	Spending Forecast	
Estimate at Complete				
RL-0011	Nuclear Materials Stabilization and Disposition	134.5	126.4	8.2
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	32.4	30.8	1.5
RL-0012	15-D-401 Sludge Retrieval Project	65.0	45.2	19.8
RL-0013	Waste and Fuels Management Project	112.1	92.7	19.5
RL-0030	Soil, Groundwater and Vadose Zone Remediation	126.6	108.3	18.3
RL-0040	Nuclear Facility D&D, Remainder of Hanford	38.9	25.8	13.1
RL-0041	Nuclear Facility D&D, River Corridor	146.3	108.7	37.6
RL-0042	Fast Flux Test Facility Closure	3.9	1.9	2.0
Total Estimate at Complete		659.6	539.6	120.0
Incremental Scope Pending Change Management				
RL-0011	Nuclear Materials Stabilization and Disposition	0.0	0.0	0.0
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	0.0	0.0	(0.0)
RL-0012	15-D-401 Sludge Retrieval Project	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	0.0	2.7	(2.7)
RL-0030	Soil, Groundwater and Vadose Zone Remediation	0.0	12.5	(12.5)
RL-0040	Nuclear Facility D&D, Remainder of Hanford	0.0	3.2	(3.2)
RL-0041	Nuclear Facility D&D, River Corridor	0.0	15.5	(15.5)
RL-0042	Fast Flux Test Facility Closure	0.0	0.0	0.0
Total Incremental Work Scope		0.0	33.9	(33.9)
Total Fiscal Year Spend Forecast				
RL-0011	Nuclear Materials Stabilization and Disposition	134.5	126.4	8.2
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	32.4	30.9	1.5
RL-0012	15-D-401 Sludge Retrieval Project	65.0	45.2	19.8
RL-0013	Waste and Fuels Management Project	112.1	95.4	16.8
RL-0030	Soil, Groundwater and Vadose Zone Remediation	126.6	120.7	5.8
RL-0040	Nuclear Facility D&D, Remainder of Hanford	38.9	28.9	9.9
RL-0041	Nuclear Facility D&D, River Corridor	146.3	124.2	22.1
RL-0042	Fast Flux Test Facility Closure	3.9	1.9	2.0
Total		659.6	573.5	86.1

Funds/Variance Analysis

FY2017 expected funding did not change in the month of May and remains at \$659.6 million. The total spending forecast decreased by \$2.5 million from last month which includes a net credit of \$2.1 million distribution of variances for the Labor and General and Administrative (G&A) pools.

BASELINE CHANGE REQUESTS

In May 2017, CHPRC approved and implemented 12 Baseline Change Requests (BCRs) into the Performance Measurement Baseline (PMB). Three of the 12 BCRs impacted the PMB. Each change request is identified in the table below:

Change Request #	Title	PBS	Summary of Change
BCR-000-17-003R0	<i>Add Comprehensive EAC Kick-Off Milestones to PMB</i>	000s	This BCR added a start milestone for kicking off the annual EAC update, as well as two finish milestones, one for the “Annual Comprehensive EAC Update” and one for the “Annual PMB Update”. This BCR does not change the PMB value.
BCR-013-17-016R0	<i>RL-0013 Convert T Plant Upgrade Planning Package into Work Packages</i>	RL-0013	This BCR converted the T Plant Upgrades Planning Package into Work Packages for the scope to remove and rebuild 221-T Dock 2. This BCR does not change the PMB value.
BCR-030-17-018R0	<i>Convert 200-EA-1 Characterization Opportunistic Planning Package to Work Package</i>	RL-0030	This BCR converted the planning package in WBS 030.31.30.11.03 200 East Characterization, activity 30.31.30.11.3000 200 EA-1 Characterization (Planning Package) into discrete work scope for conducting soil sampling during drilling at well location C9617 (Well 299-E25-218) and performing sample analysis and validation. This BCR does not change the PMB value.
BCR-030-17-019R0	<i>RL-0030 Correct Schedule Activity Date</i>	RL-0030	This BCR corrected an activity date error resulting from implementation of April BCR-PRC-17-021R0. This BCR does not change the PMB value.
BCR-030-17-020R0	<i>Revise TPA M-016-193 Due Date</i>	RL-0030	This BCR revised the due date for TPA M-016-193, per TPA change notice M-16-16-05 and corrected TPA coding for M-015-79. This BCR does not change the PMB value.
BCR-040-17-012R0	<i>RL-0040 Add TPA Milestone M-085-82 to PMB</i>	RL-0040	This BCR added TPA M-085-82 into the PMB schedule. This BCR does not change the PMB value.
BCRA-041C-17-013R0	<i>RL-0041 CAP Base Year Shift in Support of FY2018 Annual Update</i>	RL-0041	This BCR was performed to ready the RL-0041 Capital Asset Project P6 and Cobra files for initiating the FY2018 Annual PMB Update. This BCR does not change the PMB value.
BCR-041-17-021R0	<i>Incorporate CO #305 Increase the NTE Cost Authority, Remaining NTE Value</i>	RL-0041	This BCR incorporated the remaining scope and NTE increase for contract modification 585 for change order #305, 300-296 Waste Site Design Review. This BCR increased the PMB value by \$1,655K.
BCRA-041-17-023R0	<i>RL-0041 OA Base Year Shift in Support of FY2018 Annual Update</i>	RL-0041	This BCR was performed to ready the RL-0041 non-Capital Asset Project P6 and Cobra files for initiating the FY2018 Annual PMB Update. This BCR does not change the PMB value.
BCR-041-17-025R0	<i>300-296 Waste Site Project Update to FY2017 Forward Pricing Rates</i>	RL-0041	This BCR replaced the FY2016 rates with the FY2017 forward pricing rates to make the projects within RL-0041 have consistent rates in the PMB. This BCR decreased the PMB value by \$68K.

BCRA-PRC-17-025R0	<i>HPIC Updates May 2017</i>	RL-0011, RL-0012, RL-0013, RL-0030, RL-0040, RL-0041, 000s	This BCR incorporated May FY2017 Hanford Programs Integrated Control Module (HPIC) updates. This BCR does not change the PMB value.
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The Allocated (Distributed) Budget increased by \$1,587K.

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
BCR-PRC-17-026R0	<i>Undistributed Budget Adjustments May 2017</i>	RL-0013, RL-0030, RL-0040, RL-0041	2017-2018	\$2,318K

The Undistributed Budget increased by \$2,318K.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
N/A	<i>N/A</i>	N/A	2017 – 2018	N/A

Overall, there was no change in Management Reserve (MR) during May.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	<i>N/A</i>	N/A	2017 – 2018	N/A

Overall, there was no change to the Fee during May.

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 fiscal year. The PMB values of change requests are summarized by fiscal year in the tables below (dollars in thousands):

May 2017 Summary of Changes

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
April 2017 Estimate									
PMB	3,391,477	391,653	471,323	504,826	485,033	451,134	2,303,969	5,695,446	5,695,446
MR	0	0	0	0	30,923	31,798	62,721	62,721	62,721
Fee	155,504	14,325	14,501	27,804	10,546	18,636	85,811	241,315	241,315
Total	3,546,981	405,978	485,824	532,630	526,501	501,568	2,452,500	5,999,481	5,999,481
May 2017 Change									
PMB									
Change to PMB	0	0	0	0	1,586	2,318	3,904	3,904	3,904
MR									
Change to MR	0	0	0	0	0	0	0	0	0
Fee									
Change to Fee	0	0	0	0	0	0	0	0	0
Total Change	0	0	0	0	1,586	2,318	3,904	3,904	3,904
May 2017 Estimate									
PMB	3,391,477	391,653	471,323	504,826	486,620	453,452	2,307,873	5,699,350	5,699,350
MR	0	0	0	0	30,923	31,798	62,720	62,720	62,720
Fee	155,504	14,325	14,501	27,804	10,546	18,636	85,811	241,315	241,315
Total	3,546,981	405,978	485,824	532,630	528,088	503,886	2,456,404	6,003,385	6,003,385

Changes to/Utilization of Management Reserve in May 2017

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
April 2017 MR Totals								
RL-0011	0	0	0	0	6,875	0	6,875	6,875
RL-0012	0	0	0	0	6,411	3,262	9,673	9,673
RL-0013	0	0	0	0	1,422	7,208	8,629	8,629
RL-0030	0	0	0	0	8,081	10,380	18,462	18,462
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	8,095	10,847	18,942	18,942
RL-0042	0	0	0	0	38	101	139	139
Total	0	0	0	0	30,923	31,798	62,720	62,720
May 2017 MR Changes/Utilization								
RL-0011	0	0	0	0	0	0	0	0
RL-0012	0	0	0	0	0	0	0	0
RL-0013	0	0	0	0	0	0	0	0
RL-0030	0	0	0	0	0	0	0	0
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	0	0	0	0
RL-0042	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
May 2017 MR Totals								
RL-0011	0	0	0	0	6,875	0	6,875	6,875
RL-0012	0	0	0	0	6,411	3,262	9,673	9,673
RL-0013	0	0	0	0	1,422	7,208	8,629	8,629
RL-0030	0	0	0	0	8,081	10,380	18,462	18,462
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	8,095	10,847	18,942	18,942
RL-0042	0	0	0	0	38	101	139	139
Total	0	0	0	0	30,923	31,798	62,720	62,720

SELF-PERFORMED WORK

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

Contract-to-Date Actual Awards & Mods				Projection to FY2018	
10/1/2008 - 5/31/2017				Planned Subcontracting:	\$2,720,084,369
Reporting Category				Contract-to-date awards:	\$2,539,832,796
				Bal remaining to award:	\$180,251,573
	\$ Value	%	Goal %	Goal award\$	Bal to Goal
SB	\$1,397,158,004	55.01%	49.3%	\$1,341,001,594	-\$56,156,410
SDB	\$253,034,524	9.96%	8.2%	\$223,046,918	-\$29,987,606
SWOB	\$269,631,790	10.62%	7.5%	\$204,006,328	-\$65,625,463
HUB	\$63,425,608	2.50%	2.2%	\$59,841,856	-\$3,583,752
VOSB	\$196,080,348	7.72%	3.5%	\$95,202,953	-\$100,877,395
SDVO	\$115,055,398	4.53%	1.3%	\$35,361,097	-\$79,694,302
NAB	\$56,884,675	2.24%	N/A	PRC clause H.20 small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
Large	\$651,736,951	25.66%	N/A		
GOVT	\$3,398,569	0.13%	N/A		
GOVT CONT	\$483,186,359	19.02%	N/A		
EDUCATION	\$112,069	0.00%	N/A	CHPRC Contract Value:	\$5,732,255,464
NONPROFIT_	\$3,815,983	0.15%	N/A	17% rqmt:	\$974,483,429
FOREIGN	\$424,861	0.02%	N/A	SB actual:	\$1,397,158,004
Total	\$2,539,832,796	100.00%	N/A	Bal to rqmt	-\$422,674,575

Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.5 billion in goods and services, with over 55 percent going to small businesses. Nearly all subcontracting goals have been exceeded.
2. Approximately 91 percent of the total dollars arise from service and staffing contracts and contract amendments, with 6 percent of the remaining expenditures arising from P-Card purchases and 3 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, Inc. (PFNW) locations. RL is the authorized shipper and acts as signatory on the shipping papers, and ensures DOE Manual 460.2-1 is complied with RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) 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 (TSD) requirements.	Ongoing
J.12/C.2.3.6	PBS-13, Transuranic Waste Certification	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the CBFO.	No WIPP shipments are planned within the 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)



T. E. Bratvold
Vice President for
Plutonium Finishing
Plant Closure
Project

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The removal of plutonium-contaminated process equipment continued with a particular focus on removing gloveboxes, associated piping, and ductwork. All gloveboxes have been removed from E4 ventilation, and all preparations for demolition starting in the Plutonium Reclamation Facility (PRF) are complete. Initiation of demolition on the PRF started in early November 2016. Initiation of demolition on the 242-Z Facility started in early January 2017 and was completed in April 2017. Demolition on the 236-Z facilities is ongoing.

The Plutonium Finishing Plant (PFP) Closure Project continues to maintain PFP facilities compliant with authorization agreement requirements.

Significant accomplishments in May included:

- Continued preparations for removal of HC-7C glovebox from 234-5Z.
- Removed the HA-7A glovebox from the 234-5Z Facility and staged for shipment to Perma-Fix Northwest.
- Completed grouting of the 234-5Z pipe trenches.
- Completed grouting of the pits in the 234-5Z Facility.
- Draining, venting, isolating, drying, and epoxy filling of Transuranic (TRU) drain lines in the 234-5Z below-grade tunnels is 85 percent complete.
- Continued demolition activities on 236-Z Facility.
- Abated 1,478 feet of asbestos.
- Removed or dispositioned in place 499 feet of process vacuum piping.
- Shipped 73 cubic meters (m³) TRU Waste.
- Shipped 410 m³ Low Level Waste/Mixed Low Level Waste (LLW/MLLW).

Key Metrics

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
COMPLETE Glovebox/ Hood Removed or Dispositioned in Place	-	232 gloveboxes/hoods
COMPLETE KPP Rooms/Areas Ready for Demo	-	60 rooms/areas
Asbestos/ Asbestos Containing Material (ACM) Removed	1,478	33,089
Process Vacuum Piping Dispositioned	499	7,066 feet
COMPLETE Process Transfer Line Dispositioned	-	1,525 feet
COMPLETE Pencil Tank Units Removed (Shipped)	-	196 pencil tank units
Buildings Ready for Demo	-	50 structures
Buildings Demolished or Removed	-	49 structures
Non-radioactive Waste Shipped	5	81 m ³
Transuranic /Transuranic Mixed (TRU/TRU-M) Shipped	73 m ³	2,487m ³
LLW/MLLW Shipped	410 m ³	9,197 m ³

Environmental Management System (EMS) Objectives and Target Status

Objective #	Objective	Targets	Actions	Due Date	Status
16-EMS-PFP-OB1-T1	Minimize emissions resulting from demolition of 234-5Z, 236-Z, 242-Z, and 291-Z.	Inspect 234-5Z, 236-Z, 242-Z, and 291-Z for the presence of asbestos containing materials (ACM) and produce a report identifying ACM, requiring removal or abatement and methods for protecting remaining ACM from resulting in visible emissions.	1. Issue report documenting thorough inspection of 236-Z.	08/16/16	100%
			2. Issue report documenting thorough inspection of 242-Z.	05/26/16	100%
			3. Issue report documenting thorough inspection of 234-5Z. (This will be completed Early June 2017.)	04/30/17	100%
			4. Issue report documenting thorough inspection of 291-Z.	05/30/17	100%
17-EMS-PFP-OB1-T1	Reduce the risk of noncompliance with environmental requirements during demolition at PFP.	Reduce risk of noncompliance with applicable environmental requirements by enhancing the environmental screening process for demolition packages for 242Z, 234-5Z, and 291Z, thereby reducing the overall impacts from PFP's significant aspects.	1. Create ready-for-demolition checklist for 242Z/ZA.	11/30/16	100%
			2. Review 242Z/ZA demolition work package against environmental requirements.	12/29/16	100%
			3. Create ready-for-demolition checklist for 291Z.	02/28/17	100%
			4. Review 291Z demolition work package against environmental requirements.	03/30/17	100%
			5. Create ready-for-demolition checklist for 234-5Z.	03/30/17	100%
			6. Review 234-5Z demolition work package against environmental requirements.	04/27/17	100%

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	6	71	<ul style="list-style-type: none"> • 5/1/2017 - Employee struck his right elbow against the handle of the rolling ladder, receiving a minor contusion. The employee was taken to HPMC for evaluation and treatment, and returned to work without restrictions. (24443) • 5/2/2017 - Employee inadvertently rolled his right ankle, suffering a minor sprain. Employee was taken to HPMC for evaluation and treatment. Employee was given over the counter Medicine and released without restrictions. (24446) • 5/4/2017 - No recent event was identified by the employee. Employee is currently being reassigned from PFP to another work location. Employee wanted to have the injury documented prior to leaving PFP. Employee has pain in their right shoulder caused by performing lifting and repetitive work activities over the last 15 years. (24448) • 5/8/2017 - Employee received an insect bite/sting to the right forearm area. Started experiencing itching, swelling and redness at the site of the insect bite/sting. Employee was taken to HPMC for evaluation and treatment, and returned to work without restrictions. (24451) • 5/8/2017 - Employee was performing a survey of a Bobcat out of Radiological buffer area (RBA) when the vehicle hit him in the upper thigh on his left leg. Employee was given OTC medication and told to report back the following morning and to report back on Thursday for another follow-up. (24452) • 5/30/2017 - Employee experienced a burning sensation to the areas of sunblock application, face, and both arms, along with prickly looking skin to both arms. Employee was taken to HPMC for evaluation and treatment, and returned to work without restrictions. As the employee's body temperature began to cool, the symptoms started to dissipate. (24471)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments

234-5Z

- Abated 1,478 feet of asbestos.
- Removed or dispositioned in place 499 feet of process vacuum piping.
- Completed grouting of the 234-5Z pipe trenches.
- Completed grouting of the pits in the 234-5Z Facility.
- Draining, venting, isolating, drying, and epoxy filling of Transuranic (TRU) drain lines in the 234-5Z below-grade tunnels is 85 percent complete.
- Continued preparations for removal of HC-7C glovebox from 234-5Z.
- Removed the HA-7A glovebox from 234-5Z and staged for shipment to Perma-Fix Northwest.

PFM Waste Operations

- Shipped 73 m³ TRU/TRU-M waste.
- Shipped 410 m³ LLW/MLLW.

Demolition Activities

- Continued demolition activities on the 236-Z Facility.

PTS

- Training and Procedures
 - o Completed a difficulty, importance, and frequency analysis on the PFM Waste Operations Nuclear Chemical Operator (NCO). Initial course to transition from qualification format to task specific training.

MAJOR ISSUES

- None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

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

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	

RL-0011/WBS-011.OA

Explanation of major changes to the project monthly spotlight chart:

PFP-096, PPE availability or failed respirator equipment impacts planned D&D work, was removed as a Realized Risk in the month of May. It is now being reported as a High Threat Value Risk.

Realized Risks (Risks that are currently impacting project cost/schedule)

PFP-092-02: Final Facility Characterization Identifies Unexpected Hold-up	Unexpected or late discovery of radiological (Pu) or chemical (asbestos) holdup requiring added facility deactivation. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$380K, 24 days	●	↓	<p>Risk Event: Based on characterization data, the amount of asbestos insulated piping to be removed had been estimated since Fiscal Year 2013 to be approximately 24,000 linear feet. In January, about an additional 10,000 feet of asbestos was discovered, taking the total of asbestos to be removed to about 35,829 feet. No additional asbestos was discovered in May. With May 2017 progress, the PFP project has actually removed over 33,089 linear feet to date, with additional asbestos still remaining to be removed.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 75%;">Risk Recovery action(s)</th> <th style="width: 10%;">Risk Date</th> <th style="width: 10%;">FC Date</th> <th style="width: 5%;">%</th> </tr> </thead> <tbody> <tr> <td>Collaborate with safeguards to develop and approve safeguards termination criteria for remnant piping and duct work.</td> <td>01/09/17</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Collaborate with criticality safety to recognize the reduced removal action necessary for safeguard termination and as feasibly warranted, revise. CSER requirements to achieve a criticality incredible state.</td> <td>01/09/17</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Work with RL to utilize contingency for about an additional 10,000 feet of asbestos identified during walkdowns and inspections.</td> <td>01/09/17</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Finalize path forward for stubs and segments.</td> <td>4/27/17</td> <td>5/25/17</td> <td>100</td> </tr> </tbody> </table> <p>Recovery Assessment: Based on completed inspections, this risk has been realized by additional TSI identified that was not part of the original engineering estimate that was used to develop the RL-011 baseline. Recovery actions focus on managing the need for added asbestos abatement work. Discussions with RL are under way on utilizing contingency funds to strengthen the asbestos abatement work force to complete the added scope of work. With respect to the emerging risk regarding characterization of remnant stubs and piping left for facility demolition, RL formally accepted the proposed Safeguards termination criteria. Current accounting of remnants is tracking to achieve criticality incredibility conditions. Final consideration of impacts to air dispersion modeling as well as waste disposition have been evaluated, resulting in finalizing the scope of ductwork in need of removal and that which can remain in place for demolition. While the safeguards, criticality safety, and air dispersion programmatic action has enabled the opportunity to reduce scope of remaining ongoing facility deactivation work, such relaxation does not come without added rigor. There is now need to determine whether or not it is best to either apply fixatives and verify effectiveness, or foam, or continue with planned removal of an itemized list of stubs and segments. Given the potential impact to the 234-5Z demolition schedule, per PRC-MP-PC-40167, this risk remains critical.</p>	Risk Recovery action(s)	Risk Date	FC Date	%	Collaborate with safeguards to develop and approve safeguards termination criteria for remnant piping and duct work.	01/09/17	Complete	100	Collaborate with criticality safety to recognize the reduced removal action necessary for safeguard termination and as feasibly warranted, revise. CSER requirements to achieve a criticality incredible state.	01/09/17	Complete	100	Work with RL to utilize contingency for about an additional 10,000 feet of asbestos identified during walkdowns and inspections.	01/09/17	Ongoing	N/A	Finalize path forward for stubs and segments.	4/27/17	5/25/17	100
Risk Recovery action(s)	Risk Date	FC Date	%																					
Collaborate with safeguards to develop and approve safeguards termination criteria for remnant piping and duct work.	01/09/17	Complete	100																					
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Work with RL to utilize contingency for about an additional 10,000 feet of asbestos identified during walkdowns and inspections.	01/09/17	Ongoing	N/A																					
Finalize path forward for stubs and segments.	4/27/17	5/25/17	100																					

Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)

No critical risks identified in the month of May.

High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)

Risk Title	Unmitigated Risk Impacts	Assessment		Comments								
		Month	Trend									
RL-0011/WBS-011.OA												
<p>PFM-DEMO-24: Stop work from concerned workers</p>	<p>Concerned workers results in a stop work to address an off-normal or safety issue. The work cannot be restarted until the implementation of corrective actions is completed. Risk Handling Strategy: Accept</p> <p>Probability: Very Likely (>90%) Worst Case Impacts: \$0K, 24 days</p>	●	↑	<p>Risk Trigger: The project experiences stop works from concerned workers due to SCBA cylinders, failed respirator equipment, chemical concerns, contamination events, and jurisdictional issues.</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 major changes in the month of May. The mitigation strategies have been put in place; as a result, the risk strategy is to accept with no further mitigation actions.</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>PFM-096: PPE availability or failed respirator equipment impacts planned D&D work</p>	<p>Due to old generation personal protective equipment (PPE), respirator equipment fails during planned D&D work and it impacts the project with cost and schedule delays. Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%) Worst Case Impacts: \$300K, 24 days</p>	●	↑	<p>Risk Trigger: The project previously experienced impacts from a stop work that was issued by another Hanford contractor on the use of respirators as a result of a powered air purifying respirator (PAPR) shutting down during a training evolution on the use of the equipment.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure additional PPE with new generation respirator equipment.</td> <td>04/15/16</td> <td>Ongoing</td> <td>Ongoing</td> </tr> </tbody> </table> <p>Mitigation Assessment: During the month of March, the project experienced issues with the shutdown of four PAPR units. There was no impact to the project, as spare respirators had been previously procured to mitigate the potential of this risk occurring. However, a stop work on the use of the PAPR units was issued by another Hanford contractor during a training class on the use of the PPE, resulting in the inability to complete insulator 40 hour Occupational Safety and Health Administration (OSHA) training, and impacting the ability to deploy the insulator resources into the field to support asbestos removal activities at PFM. This issue was resolved, and there were no impacts to the PFM project as a result of this incident. This risk was designated to be realized based on several events related to failed PPE. The vendor (Mine Safety Appliance) recognized that there was a defect in the units that were procured, and has replaced all of the units that were purchased and introduced into the field at no cost to CHPRC. The mitigation strategies have been put in place; as a result, the risk strategy is to accept with no further mitigation actions.</p> <p>As field work winds down, more spare respirators are becoming available. As a result, this risk no longer poses a threat to the project. As such, it will be removed from the Stoplight Report in June.</p>	Mitigation action(s)	Risk Date	FC Date	%	Procure additional PPE with new generation respirator equipment.	04/15/16	Ongoing	Ongoing
Mitigation action(s)	Risk Date	FC Date	%									
Procure additional PPE with new generation respirator equipment.	04/15/16	Ongoing	Ongoing									
Unassigned Risks (Pending ownership of identified risks/opportunities)												
No unassigned risks identified in the month of May.												

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled (BCWS)	Budgeted Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	0.2	2.3	10.2	2.2	1241.7%	(7.9)	-340.2%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (+\$2.2M/+1241.7%)

The current month positive schedule variance is primarily due to completion of historical BCWS associated with the 26-inch process vacuum removal, characterization, asbestos, drain lines, E3/E4 duct scope, trench grouting, and drain line remediation in 234-5Z, sample, and process vacuum system removal in 291-Z, and demolition activities associated with the 236-Z Facility. The 236-Z demolition scope was to be performed in the third quarter of 2016; however, delays in getting 236-Z ready for demolition negatively impacted the start of both 236-Z and 242-Z demolition. Demolition of 236-Z is currently scheduled to complete on July 31, 2017. Because all work is historical, the current schedule variance will be favorable going forward. The positive schedule variance is partially offset by additional scope that has been identified, requiring the removal of an additional ~10,000 feet of asbestos that was not visible on any plant drawings when the baseline was developed, further delaying the demolition-ready activities. Recovery efforts from the January contamination event associated with the PRF demolition activities, efforts to drain liquids in the ducting leading up to Filter Box 20, and the delay in the demobilization and installation of the cover cap following demolition of PFP. The demobilization work has been significantly impacted due to the delays in getting 291-Z and 234-5Z ready for demolition, and cannot occur until all buildings are demolished.

CM Cost Variance: (-\$7.9M/-340.2%)

The current month negative cost variance is primarily due to the delay in completion of the PFP Project to achieve slab on grade. The delay is causing needed extensions of both Minimum Safe, Maintenance, and D&D project management resources, without BCWS, to support the remaining D&D work scope until the facility becomes ready for demolition. Further, working historical BCWS for removal of HA-7A and HC-7C gloveboxes and work on E4 duct removal and fixative requiring more effort than expected in addition to continued support on apportioned activities associated with the discrete work efforts are also contributing to this variance. In addition, asbestos abatement and process vacuum removal are all requiring more time and additional resources to complete work. Additional resources (i.e., pipefitters, electricians, insulators, Radiological Control Technicians) have also been hired temporarily to attempt to recover schedule. Additional activities have been identified that require removal of an additional ~10,000 feet of asbestos that was not visible on any plant drawings when the baseline was developed, further delaying the demolition ready activities. Due to delays in ready-for-demo activities, resources supporting waste processing activities that were planned to be completed in FY2016 are continuing to charge for support of waste loadout, processing, and shipping. Additional unplanned shipping materials (waste shipping containers TL-1800s, SLB2s, IP-1 bags, etc.) were also required to support waste loadout activities for TRU waste disposition efforts. Unplanned shipments to Perma-Fix Northwest for the size reduction of 236-Z gloveboxes (MT-4 and 18M) and E4 ducting in 234-5Z have caused additional costs to support ready for demolition activities, also contributing to the unfavorable variance. In addition, due to the historical (December 2015) radiological issues resulting in compensatory measures that have been

implemented at PFP, additional radiological and industrial hygiene resources have been assigned to support the PFP project until the slab on grade milestone is met.

Contract-to-Date (\$M)

WBS 011/ RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	980.1	939.2	1,024.9	(40.9)	-4.2%	(85.7)	-9.1%	980.5	1,069.4	(88.9)

Numbers are rounded to the nearest \$0.1 million

Contract-to-Date (CTD) Schedule Variance (-\$40.9M/-4.2%)

The CTD schedule variance is within threshold.

CTD Cost Variance (-\$85.7M/-9.1%)

The negative CTD cost variance is primarily a result of prior year unrecoverable costs as well impacts to D&D work scope and extending level-of-effort and support services, consistent with delayed activities, in support of completing Tri-Party Agreement Milestone M-083-00A. In addition, unplanned costs to support implementation of efficiency initiatives at PFP (i.e., foaming and PremAire Breathing Air), and increased training as a result of assignment of new Health Physics Technicians, and D&D workers (as the result of Hanford Atomic Metal Trades Council (HAMTC) lamping process) to PFP have also contributed to this variance. Additional resources to recover schedule for asbestos removal activities and to cover the additional asbestos needing to be removed that was recently identified (~10,000 feet). Additional unplanned shipping materials (waste shipping containers TL-1800s, SLB2s, IP-1 bags, etc.) were also required to support waste loadout activities for TRU waste disposition efforts. Unplanned shipments to Perma-Fix Northwest for the size reduction of 236-Z gloveboxes (MT-4 and 18M) and E4 ducting in 234-5Z have caused additional costs to support ready-for demo activities also contributing to the unfavorable variance. This is partially offset by utilization of fewer breathing air suits and hoses being used than originally planned for 242-Z entries as a result of fewer field work team members required to perform hands-on work in 242-Z because of the confined space and size of suits (three suits per day vs. five).

Variance at Completion (-\$88.9M/-9.1%)

The Variance at Completion (VAC) unfavorable variance is reflective of previous inability to achieve 20 percent increased efficiency associated with time on respirator as assumed in the baseline plan. The Collective Bargaining Agreement was accepted, and recognized efficiencies are continuing to be recognized with more time on mask and implementation of the value engineering initiatives associated with high-mass gloveboxes and grouting. Extended hotel loading costs as a result of delays in demolition ready and demolition activities caused by issues identified in the CTD schedule variance above are also driving the negative VAC. As a result of wall removals and electrical isolations, it was discovered that approximately 10,000 feet of additional asbestos was between the walls that would need to be removed. This is a recognized risk (PFP-092-02) and has been incorporated into the VAC. Of note, CHPRC is working with RL to utilize contingency for the additional 10,000 feet of asbestos identified during walkdowns and inspections and relief from the 30 weather delays experienced December through March, 2017. Finally, increased utilization of overtime is being used to ready the 234-5Z Facility for demolition by June 2017. This is partially offset by recognized efficiencies due to characterization data in the 234-5Z duct level allowing piping and ducting to be left in place for demolition. The variance at

completion is reflective of PFP's current projected date to reach slab on grade no later than September 30, 2017.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	134.5	126.4	8.2
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0011 - Total	134.5	126.4	8.2

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

FY2017 expected funding for project breakdown structure (PBS) RL-0011 remained at \$134.5 million. The fiscal year spend forecast (FYSF) for May remained at \$126.4 million. The funds in this control point for estimate to complete (ETC) for regular scope are adequate to support current work. Recognized efficiencies will be necessary to support slab removal if RL direction to perform this work is received.

Critical Path Schedule

The PFP Critical Path Schedule begins with the continuation of demolition on the first floor of 236-Z PRF. This leads to the removal of the four Gallery gloveboxes in PRF and then demolition of the PRF canyon. Once completed, demolition will begin on the Remote Mechanical A (RMA) Process Line and RMC Process Line in the 234-5Z building. Finally, demolition of the Radioactive Acid Digestion Test Unit (RADTU) and basement areas completes the 234-5Z Facility, as well as meeting the requirements for the Tri-Party Agreement Milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PFP Facility Transition and Selection Disposition Activities	09/30/17		9/11/17	During the month of May, the PFP project lost 11 days on the schedule from the April month-end forecast completion date of the Tri-Party Agreement milestone for the PFP Project to reach slab on grade. This is a result of impacts from PUREX Tunnel Collapse closing the site for access to PFP, high winds, lightning storms, and increased efforts to load out debris from the PRF demolition efforts. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, it is expected that efficiencies will be recognized, evaluated, and implemented to recover some schedule delays.

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	Offsite Transportation of Radioactive Material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford Site and Perma-Fix Northwest (PFNW) locations. RL is the authorized shipper and acts as signatory on the shipping papers, and ensures DOE Manual 460.2-1 is complied with. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) 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 (TSD) requirements.	Ongoing

DOE ACTIONS / DECISIONS

None at this time.

Section B

Spent Nuclear Fuel Stabilization and Disposition (RL-0012)



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

T Plant facility modifications for sludge storage are projected to complete on May 24, 2017 (PM-12-4-17).

Initiated K-Basin Pre-operational Acceptance Testing (KPAT) on April 20, 2017. Testing continued throughout May and is forecasted to complete October 11, 2017.

Prepared Final Safety Analysis Report/Technical Safety Requirements (FSAR/TSR) revision to facilitate KPAT integrated testing. Formal submission is forecast for May 31, 2017, and RL approval is anticipated prior to end of the June.

Continued working with RL to address comments arising from Documented Safety Analysis (DSA)/TSR revision submitted April 12, 2017. RL approval is required by June 30, 2017, to avoid impacts to the project's critical path.

Based upon discussions between RL and CHPRC Senior Management, the Sludge Treatment Project (STP) Team has modified the Field Execution Schedule (FES) to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant in fiscal year (FY) 2018. On March 27, 2017, CHPRC formally submitted letter CHPRC-1701045 R1 - *Contract Number DE-AC06-08RL14788 – Change Proposal CP 012 PRC 1646, Revision 0, Sludge Removal Project Acceleration of 105K and T Plant* for RL approval. RL responded with Change Proposal (CP) Request for Information (RFI) – 1646-1, 2, & 3, dated April 28, 2017, May 12, 2017, and May 17, 2017, respectively. CHPRC is reviewing the RFIs and will transmit responses to RL in June. In order to meet the accelerated schedule, support from CHPRC and RL is required for the following assumptions:

- Significant overtime/weekend work is required to reduce the schedule duration.
- Approval of the integrated 105KW DSA must not affect the project's critical path. This integrated DSA/TSR includes as-built information from installation activities and, therefore, a subsequent "as-built" DSA/TSR submittal is not required.
- Sludge Removal Project (SRP) critical decision (CD)-4 approval must occur concurrently with commencing sludge retrieval operations.
- Approval of the T Plant safety documentation must be completed within 120 days of submittal.
- To demonstrate the current forecast date of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) M-016-175, *Begin Sludge Removal From 105-KW Fuel Storage Basin*, the milestone has been disconnected from the risk analysis schedule margin. The current non-risk adjusted forecast date to begin sludge removal is January 29, 2018.

The effort to retrieve and containerize the sludge pile in the KW Basin Center Bay discovered during debris mapping continued as resources allow.

Project breakdown structure (PBS) RL-0012 scope is 91 percent complete, and performance to date is positive, with a cumulative Schedule Performance Index (SPI) of 1.00 and a cumulative Cost Performance Index (CPI) of 1.05.

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Dart Injuries	0	1	N/A
Recordable Injuries	0	1	N/A
First Aids	1	15	<ul style="list-style-type: none"> 5/25/2017: While getting into a truck, employee struck elbow on doorjamb. Body Part affected: Elbow (24470)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

100K Operations

- The 100K Operations group continued maintaining facilities in a safe and compliant condition. Crews continued debris dose mapping, relocation activities in 105KW Basin, and performance of several monthly and quarterly routines during the period.

KW Basin Sludge Removal Capital Asset Project

- KPAT/Construction
 - Initiated KPAT testing on April 20, 2017. Completed a substantial number of component level and system leak tests. The test is approximately 10 percent complete.
 - Completed final installation of rolling stairs and bumper transition to Sludge Transportation System (STS) trailer.
 - Completed annual preventative maintenance (PM) on Annex overhead roll-up door, including both drop tests and resets.
 - Completed Radiation Monitoring System equipment cables along with final terminations and locations for equipment.
 - Completed power-up and started the Annex Ion Exchange Module (IXM) simulator to support KPAT.
 - Remobilized STS trailer into Annex loading bay and re-connected hoses to Sludge Transport & Storage Container (STSC) to support KPAT.
- The proposed revision to the current 105KW Basin FSAR and TSR to support KPAT testing was reviewed with the RL Nuclear Safety Division (NSD) Staff and their feedback was incorporated. The updated documentation is in internal review and will be formally submitted on May 31, 2017, to RL for approval. The change consists of an additional safety basis design feature to prevent lowering a XAGO (Sludge Retrieval) tool into an Engineered Container containing sludge, thereby preventing sludge retrieval during KPAT. Approval of this change will authorize execution (from a Nuclear

Safety Basis perspective) of integrated system testing during KPAT using basin water. The new 105KW Facility DSA and TSR must still be approved by June 30, 2017, to allow sufficient time to support training, procedure development, formal safety basis implementation, and completion of readiness preparations prior to the Operational Readiness Review (ORR) that will authorize full-up Engineered Container Retrieval and Transfer System (ECRTS) Operation.

- CHPRC Transportation Safety (TS) personnel provided proposed disposition/resolution to the DOE-HQ, EA-41 comments on the One Time Request for Shipment (OTRS) Document. CHPRC TS personnel are awaiting concurrence from DOE. TS has also completed a draft OTRS implementation compliance matrix. OTRS approval is forecast in July.
- The Maintenance and Storage Facility (MASF) Pre-Operational Acceptance Test (MPAT) Report was approved by the STP Joint Test Group on January 31, 2017. However, comment incorporation and issuance has been given a lower priority than development and approval of KPAT Specifications/Procedures. The MPAT Test Report is forecast to complete in June 2017.
- ECRTS Procurement: STSC vessels and installation of STSC Instrumentation/Appurtenances continued through the fiscal month. The project is on track to complete the first 12 STSC assemblies by September 30, 2017 – four of 12 STSC assemblies have been completed as of May month-end. American Boiler Works (ABW) will also complete fabrication of the final 11 STSC shells by September 30, 2017. Once the final 11 STSC shells are fabricated, they will be transported to HiLine for installation of associated instrumentation and appurtenances.
- Progress continues in development of the Operations and Maintenance Procedures supporting sludge removal and packaging operations.
- Readiness documentation development continued as planned.

T Plant Preparations

- Final installation activities were completed in May, with Acceptance Test Procedures (ATPs) and Construction Completion Document (CCD) for installation of Sludge Receipt & Storage Equipment forecast to complete in June fiscal month.

MAJOR ISSUES

Sludge Removal Project

Issue:

The schedule for receipt and implementation of the integrated DSA/TSR for the 105KW Basin/Annex will no longer support the KPAT integrated test without pushing the SRP critical path.

Corrective Action:

CHPRC updated the DSA/TSR to incorporate RL comments and retransmitted the document set to RL for approval. Simultaneously, a revision to the existing FSAR has been prepared, approved, and submitted to RL for review/approval. This FSAR revision should enable execution of integrated KPAT without impacting SRP critical path.

Status:

CHPRC personnel updated the Integrated DSA/TSR to incorporate comments provided by the RL Safety Basis Review Team (SBRT) and retransmitted the updated files to RL on April 12, 2017, via CHPRC-1700081A R3 - *Transmittal of PRC-STP-00946, Revision 0, 105KW Facility Documented Safety Analysis, PRC-STP-00992, Revision 0, 105KW Facility Technical Safety Requirements, and HNF SD SNF-FHA-001, Revision 5, Fire Hazards Analysis for the 105KW Facility*. The current schedule forecast for RL approval is June 30, 2017.

In order to prevent a schedule delay on the initiation of the integrated KPAT, CHPRC submitted a revision to the FSAR/TSR for the 105KW Basin that addresses the control necessary to facilitate completion of that integrated test. The FSAR revision is forecast to be approved by RL by the end of June.

T Plant Major Issues

Issue:

CHPRC submitted the Solid Waste Operations Complex (SWOC) Master Documented Safety Analysis (MDSA)/TSR Revision 12 to RL for review and approval on November 28, 2016. On March 30, 2017, the RL Contracting Officer transmitted Letter 17-NSD-0018_RL to CHPRC providing an RL Review Comment Record (RCR) against the SWOC MDSA/TSR Revision 12 requiring resolution of 35 pages of comments and a resubmittal. The schedule for receipt of a Safety Evaluation Report (SER) approving the SWOC MDSA is currently beyond the schedule assumptions in the performance management baseline (PMB) and is in jeopardy of negatively impacting the SRP critical path.

Corrective Action:

Work with the RL NSD staff to resolve comments as expeditiously as possible. This includes expediting comment incorporation, CHPRC internal approval of the update MDSA/TSR Package, and RL approval of that package.

Status:

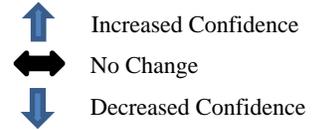
Comment resolution is completed, and the updated MDSA/TSR was resubmitted to RL in May 2017. The current schedule forecast for RL approval is June 17, 2017.

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.



Unmitigated Risk Impacts	Assessment		Comments																								
	Month	Trend																									
RL-0012/WBS-012																											
Explanation of major changes to the project monthly spotlight chart:																											
Modified risk statement for STP-067A Safety Classification of SSC's – DSA/TSR to include RL approval delays associated with key safety documentation.																											
Realized Risks (Risks that are currently impacting project cost/schedule)																											
STP-072: Delayed STSC/ECRTS Procurement & Delivery	Material delivery and fabrication issues at ECRTS vendor facilities delay the delivery of the components to the Sludge Treatment Plant (STP), resulting in cost impacts and schedule delays. Additionally, discovery of additional components requiring fabrication result in deliveries that challenge project baseline schedules. Risk Handling Strategy: Control Probability: Very Likely (>90%) Worst Case Impacts: \$3 million, 120 days																										
		Risk Event: Event 1: In order to establish a reliable Sludge Transportation System Cask configuration capable of meeting the project's needs, several ports must be reconfigured to ensure reliable leak-tight integrity. This discovery was outside of baseline material procurement plans.																									
		<table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Event 1 - Finalize Field FES activities dates consistent with change orders.</td> <td>12/7/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Complete Procurement/Fabrication</td> <td>12/7/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Deliver equipment to 100K Area</td> <td>12/7/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Replace STS Cask Seals</td> <td>12/7/16</td> <td>07/31/17</td> <td>0</td> </tr> <tr> <td>Conduct post repair leak test</td> <td>12/7/17</td> <td>08/29/17</td> <td>0</td> </tr> </tbody> </table>		Risk recovery action(s)	Risk Date	FC Date	%	Event 1 - Finalize Field FES activities dates consistent with change orders.	12/7/16	Complete	100	Complete Procurement/Fabrication	12/7/16	Complete	100	Deliver equipment to 100K Area	12/7/16	Complete	100	Replace STS Cask Seals	12/7/16	07/31/17	0	Conduct post repair leak test	12/7/17	08/29/17	0
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		Recovery Action Assessment: Event 1: Additional leak test tooling has been placed on order and is scheduled to arrive in June. Proof test on new seal will likely be delayed until fabrication of Cask Leak Test Tool and qualification by Nondestructive examination (NDE) Contractor.																									

Unmitigated Risk Impacts	Assessment		Comments																				
	Month	Trend																					
RL-0012/WBS-012																							
<p>STP-067A Safety Classification of SSCs - DSA/TSR</p> <p>RL requires CHPRC to upgrade the safety classification of systems, structures, and/or components to a more conservative safety classification, requiring CHPRC to revise key safety documentation (DSA and TSR), procedures and/or design(s). Upon submittal of revised Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR), procedures and/or design(s), RL approval takes longer than the assumptions planned for in the baseline.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$300K 120 days</p>			<p>Risk Event: CHPRC sent the DSA and TSR to RL for review and approval on October 20, 2016, in letter CHPRC-1604692. RL rejected this submittal via correspondence 1700081A/17-NSD-0006. CHPRC resubmitted the DSA/TSR via CHPRC-1700081A R3. The original project baseline included 120 calendar days for RL to approve the safety basis document; however, it has now been 214 days (as of 5/21/17) since the original submittal, with formal approval still not imminent.</p>																				
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Prepare a change order to obtain Management Reserve for realized risk.	1/28/17	Complete	100																				
<p>Recovery Action Assessment: RL and CHPRC Senior Management have met multiple times in an attempt to resolve differences on the DSA/TSR submittal. All DSA/TSR comments from the initial submittal were dispositioned as of 2/17/17. CHPRC resubmitted an updated version of the DSA/TSR incorporating RL comments on 4/12/17. Obtaining RL concurrence on comment resolution is in progress and is now forecasted to complete 6/01/17. The current forecast for receiving a SER approving the DSA/TSR is 6/30/17. Once CHPRC has received SER and confirmed no changes to assumed safety classification is needed, this risk may be closed.</p>																							
<p>Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</p>																							
<p>No critical risks identified in the month of May.</p>																							
<p>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</p>																							
<p>FY2017 Risk Triggers (Risk could be realized in FY2017)</p>																							
<p>STP-103: K Basin Pre-Operational Acceptance Testing (KPAT) & ECRTS Startup</p> <p>The ECRTS equipment does not operate as expected, requiring increased engineering, startup, operations, and construction Firm Fixed Price contractor support; as well as equipment replacement, procurement, and retesting. Realization of this risk would also require additional training, procedure revision, and design modifications because of construction testing and/or Lines of Inquiry for Readiness Review resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$4.5 million, 90 days</p>			<p>Risk Trigger: 1) The ECRTS equipment does not operate as expected. 2) Unexpected attrition of critical testing personnel.</p>																				
			<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Develop and refine procedures based upon feedback from testing and operations personnel.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Use overtime to offset schedule impacts.</td> <td>As Needed</td> <td>N/A</td> </tr> <tr> <td>Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.</td> <td>As Needed</td> <td>N/A</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Develop and refine procedures based upon feedback from testing and operations personnel.	Complete	100	Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.	Complete	100	Use overtime to offset schedule impacts.	As Needed	N/A	Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A					
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Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A																					
<p>Mitigation Assessment: KPAT Testing is in progress. No significant equipment failures as of 5/21/17.</p>																							

Unmitigated Risk Impacts	Assessment		Comments									
	Month	Trend										
RL-0012/WBS-012												
<p>STP-018-O: STP Operational Upset or Spill - During first STSC</p> <p>An operational upset or spill results in a work shutdown at K Basins, resulting in schedule delays. Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25 %) Worst Case Impacts: \$2 million, 48 days</p>	●	↔	<p>FY2018 Risk Triggers: 1) An operational upset or spill results in work shutdown at K Basin. This risk will commence in FY2018 and continue throughout the project lifecycle until the sludge is removed from 105KW Basin.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.</td> <td>10/11/17</td> <td>0</td> </tr> <tr> <td>Conduct testing and training at MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in the month of May. Forecasted mitigation dates are consistent with the overall STP critical path schedule. Training and procedure development will continue into FY2018. It will complete prior to completion of management self-assessment affidavits in December 2017.</p>	Mitigation action(s)	FC Date	%	Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	10/11/17	0	Conduct testing and training at MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.	Ongoing	N/A
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<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. Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$0K, 48 days</p>	●	↔	<p>FY2018 Risk Triggers: 1) Actual processing efficiency associated with sludge retrieval and shipping operations does not match baseline assumptions. This risk will commence in FY2018, beginning with operations campaign.</p> <table border="1"> <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 major changes in the month of May. Operations personnel were given training on the process system equipment and will continue to participate in training activities through production system installation at 100K. No foreseeable impacts in the future and no alternative course of actions are needed at this time.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A			
Mitigation action(s)	FC Date	%										
None identified at this time.	N/A	N/A										
Unassigned Risks (Pending ownership of identified threats/opportunities)												
<p>CHPRC proposed five risks that are outside of CHPRC's ability to manage and, as such, should be re-assigned to RL (STP-011D, STP-018, STP-073, STP-073-A, and STP-073-B). The proposal was not accepted by RL, stating, "the opportunities and threats appear to be under the control of CHPRC to manage." CHPRC submitted letter CHPRC-1602146 R1 on August 30, 2016, in response to RL's rejection letter. On March 14, 2017, CHPRC received Correspondence No. 1701045 providing direction to accelerate the capital portion of the SRP. The risks listed, however, are for the non-capital scope. If contract direction is given to accommodate the acceleration opportunities to the SRP non-capital scope and the transfer of all sludge to T Plant is incorporated into FY2018, then CHPRC would re-assume ownership of these risks once change is definitized. As part of the SRP acceleration, risks were re-evaluated and used as the basis for the risk analysis.</p>												

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	6.5	6.0	4.6	(0.6)	-8.9%	1.4	23.2%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$0.6M/-8.9%)

The current month negative schedule variance is due to realized Budgeted Cost of Work Scheduled (BCWS) for work completed ahead of schedule for Annex & In-Basin equipment installation.

CM Cost Performance (+\$1.4M/+23.2%)

The current month positive cost variance is due to the completion of final engineering activities for T Plant modifications; underruns on the level of effort activities in Project Management, Annex Equipment Install, and In-Basin Equipment Install, as RL-012 provided significant support to resolve the PUREX tunnel issues.

Contract-to-Date

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	674.1	674.4	644.1	0.3	0.0%	30.2	4.5%	740.6	706.3	34.2

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$0.3M/+0.0%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$30.2M/+4.5%)

The variance is within reporting thresholds.

Variance at Completion (+\$34.2M/+4.6%)

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	FY2017		Variance
	Projected Funding	Spending Forecast	
Expense - Spending Forecast	32.4	30.8	1.5
Incremental Scope Pending Change Management	0.0	0.0	(0.0)
Expense - Subtotal	32.4	30.8	1.5
Line Item (LI)	65.0	45.2	19.8
Incremental Scope Pending Change Management	0.0	0.0	0.0
LI -Subtotal	65.0	45.2	19.8
RL-0012 – Total	97.4	76.0	21.4

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

FY2017 projected funding for PBS RL-0012 is \$97.4 million. Positive variance of \$1.5 million in expense funding is the result of reclassification of Garnet Filter Media Removal and Sand Filter Media Removal scopes from PBS RL-0012 to PBS RL-0041, savings forecast for sample maintenance from Pacific Northwest National Laboratory (PNNL), and savings forecast for project management scope – work is being performed with reduced staff. Positive variance in line item (LI) for FY2017 is due to receipt of entire LI funding in current year. Unused funding will be carried over to support work planned for FY2018.

Critical Path Schedule

The critical path flows through KPAT. This test will confirm that the Sludge Removal Project (SRP) hardware is installed properly and functions consistently with the design. Following a successful Contractor & DOE Operational Readiness Review, RL will provide Authorization to Commence Retrieval Operations in parallel with the DOE-HQ review/approval of CD-4. Completing retrieval operations, including the filling of STSCs with sludge and transferring them to T Plant, to complete Tri-Party Agreement Milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin*, is outside the current contract period in FY2019. However, the STP team has modified the FES to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant in FY2018.

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. RL Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The PMB Annual Update, implemented in September 2013, and subsequent approved Baseline Change Request (BCRs) define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is the Tri-Party Agreement milestones within the CHPRC contract period (September 30, 2018).

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-175	Begin Sludge Removal from 105KW Fuel Storage Basin.	9/30/2018		1/29/2018	The forecast date does not include schedule margin from the project's risk analysis.
M-016-177	Complete installation of sludge transfer equipment in KW Reactor facilities	9/30/2017		4/20/2017(A)	Complete

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	RL Due Date
RL Review & Comment on Emergency Planning Hazard Assessment (EPHA)	5/22/17(A)	7/10/17
RL Issue SER for KW Facility DSA/TSR	4/11/17(A)	6/30/17
RL Concur on KW Facility DSA/TSR Comment Resolution	4/11/17(A)	6/15/17
RL Prepare KW Facility DSA/TSR SER	4/11/17(A)	6/27/17
RL Review KPAT FSAR / TSR Change	5/31/17	6/24/17
RL SRB Review of KW Facility DSA/TSR	4/11/17(A)	6/23/17
RL Approve / Comment Plan of Action (POA) - K-Basins	5/25/17	6/19/17
RL Final Approval of POA - K-Basins	6/24/17	6/30/17
RL Approve OTRS	6/01/17	7/17/17

Section C

Solid Waste Stabilization and Disposition (RL-0013)



C. J. Simiele
Vice President for
Waste and Fuels
Management Project

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

During the May reporting period, April 24 – May 21, 2017, Waste and Fuels Management Project (W&FMP) maintained facilities in a safe and compliant condition. Overall, the project is delivering planned efficiencies, but continues to be impacted by emerging work and realized risks.

This month:

- Waste Encapsulation and Storage Facility (WESF) Stabilization and Ventilation Project (W-130) completed waste removal from the canyon and placed in waste boxes for shipment. W-130 also removed capping of all grout fill, vent ports, and the Temporary Ventilation System (TVS) in the canyon. Clean gravel was placed on the back side of K3 parapet wall, and the area was posted as an Underground Radioactive Material Area (URMA). The project continues with closeout activities.
- Management of Cesium and Strontium Capsule (MCSC) Project (W-135) initiated the formal design review for the WESF Modifications and Capsule Storage Area (CSA). A Project Review Board Chairman was identified and the review plan finalized.
- Proposed milestone changes transmitted to RL to close M-092-05 Capsule Disposition Milestone.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
17-EMS-WFMP-OB1-T1	Implement the requirement to provide a “full printed name” in CHPRC Waste & Fuels controlled Resource Conservation and Recovery Act of 1976 (RCRA) inspection work packages and procedures.	<ul style="list-style-type: none"> • Review W&FMP inspection procedures, checklists, and work packages/PMs, which implement RCRA inspection criteria for direction to use the full printed name. • Initiate modifications to necessary procedures, checklists, and work packages/PMs, which implement RCRA inspection criteria to include the full printed name. 	5/31/17 9/28/17	50%
17-EMS-WFMP-OB2-T1	Implement 40 CFR 265 regulatory requirements identified by the Compliance Matrix for T Plant and Central Waste Complex at the project level.	<ul style="list-style-type: none"> • Review the applicable 40 CFR 265 requirements to verify the implementing mechanisms and methods, and to identify compliance gaps. • Resolve identified gaps by initiating modifications to procedures into the PPS system. 	5/31/17 9/30/17	73%
17-EMS-WFMP-OB3-T1	Ensure W&FMP procedure inspection forms, checklists, and work packages, which implement RCRA inspection requirements are capturing the RCRA inspection requirements and are appropriately located in the facility operating record.	<ul style="list-style-type: none"> • Review all inspection procedures, checklists, and work packages to identify, which are used to meet RCRA inspection requirements. • Initiate updates into PPS and/or JCS systems to ensure RCRA inspection requirements are met and documentation is appropriately placed into the facility operating record. 	5/31/17 9/30/17	50%

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	3	
Total Recordable Injuries	0	3	
First Aid Cases	3	*27	<ul style="list-style-type: none"> • 5/22/2017 - Employee was walking through the building and felt something fly into left eye. Irritation prompted employee to go to HPMC, and they could not find anything abnormal in the eye. Released back to work with no restrictions. (24466) • 5/24/17 - Employee had gust of wind blow door in, hitting employee's face and blowing dust/dirt in the eyes. Employee was wearing prescription safety glasses. Employee flushed eye with water, then contacted supervisor. HPMC flushed eye again and looked for corneal scratches. No scratches were found. Employee was given eye lubricant and released back to work with no restrictions. (24468) • 5/31/2017 - Employee noticed right shoulder was becoming sore at the end of the day after packaging expired chemicals, which had required frequent arm motion and reaching. The condition worsened overnight and the employee reported to the supervisor immediately prior to the start of shift the next day. The employee was transported to HPMC for evaluation, was diagnosed with a shoulder strain, and was provided an ice pack and OTC pain reliever. The employee was returned to work with restrictions. (24473). <p>*Two First Aid cases; PTS in support of RL-0013.</p>
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

13.01 Project Management

- o Performed/Completed:
 - Addressing comments on Tri-Party Agreement Project Management Plan Annual Update (M-091-03) document. Scheduled to be submitted to RL at the end of May.
 - The project continued detailed planning for fiscal year (FY) 2018 estimate to complete as well as FY2019-FY2020. In addition, scope and estimates are in development for FY2021-FY2022, which includes activities necessary to support disposition of transuranic (TRU) and Mixed TRU (TRUM) (TRU/M) waste governed by the Tri-Party Agreement.
 - Supported Ecology RCRA inspection of Low Level Burial Ground (LLBG) Mixed Waste Disposal Trenches (MWT) 31-34 on May 02, 2017. Response to Ecology's information request to be submitted on May 24, 2017, including information requested as a result on the April 2017 Central Waste Complex (CWC) RCRA inspection.

13.02 Capsule Storage & Disposition

- o Surveillances/ Preventative Maintenance (PM):
 - 40 PM packages.

Waste Encapsulation and Storage Facility (WESF) Stabilization and Ventilation Project (W-130):

- o Performed/Completed:
 - Waste removal from canyon.
 - Placement of six inches of clean gravel on the back side of K3 parapet wall and posted area as URMA.
 - TVS removal in WESF canyon and capping of all grout fill and vent ports.
 - Epoxy paint application to grout cap over K3 filter pit.
 - Transmittal of updated WESF Part B documents supporting closure of Hot Cell A through Hot Cell F to RL. The updated WESF Part B documents reflect changes as a result of project W130.

13.03 Canister Storage Building (CSB)

- o Performed/Completed:
 - Close out of 90-day storage pads used for chemical reduction initiative.
 - Implementation of DOE ORDER 474.2 CHANGE 3, *Nuclear Material Control and Accountability*.
 - Support of Phase I, DOE-HQ security assessment.
 - LED fixture upgrades in CSB parking lot.
 - CSB stack flow rate: Ecology and Washington State Department of Health (WDOH) issued a response to RL's General Notice of Potential Violation (GNOPV) response letter. For CSB, the action is to submit a license change. The draft license change transmittal letter was transmitted to RL.
- o Surveillances/PMs:
 - 23 PM packages.

13.06 Transuranic (TRU) Repackaging

- o PM-13-2-7
 - Repack of 209.9 cubic meters (m³) of 280 m³ fiscal year to date.
- o Repackaging Completed:
 - One Standard Waste Box (SWB) containing legacy TRU Mixed (TRUM) waste of 2.2 m³ received at CWC from Perma-Fix Northwest (PFNW), which contributed to Tri-Party Agreement Milestone M-091-47D. Repack of 145.4 m³ of 280 m³ fiscal year to date.

13.07 Waste Receiving and Processing (WRAP)

- o Performed/Completed:
 - Initiated source moves to 2404-WC.
- Surveillances/PMs:
 - 105 surveillances.
 - 18 PM packages.

13.08 T Plant

- o Performed/Completed:
 - Fan #3 repair.
- o Surveillances/PMs:
 - 419 surveillances.
 - 20 PM packages.

Sludge Receipt

- o Performed/Completed:
 - Submittal of revised Master Documented Safety Analysis (MDSA) Revision 12 to RL.
 - Construction Acceptance Test for nitrogen purge system.

- Review and approval of statement of work for Dock #2 installation.
- Initiated and completed water addition Acceptance Test Procedure.
- 13.09 Central Waste Complex (CWC) and Low-level burial ground (LLBG)**
 - o Surveillances/PMs:
 - 301 surveillances.
 - 27 PM packages.
 - o Shipments received:
 - Five Standard Large Boxes II from Plutonium Finishing Plant to CWC in three shipments.
 - Seven SWBs from PFNW into CWC in three shipments.
- 13.12 Integrated Disposal Facility (IDF)**
 - o Performed/Completed:
 - Review of draft Nuclear Criticality Safety Hazard Assessment.
 - Update of the Direct Feed Low Activity Waste integrated schedule.
- 13.15 TRU Disposition**
 - o Performed/Completed:
 - Addressing comments on the draft assessment report of the impacts associated with implementation of the new Waste Isolation Pilot Plant Waste Acceptance Criteria (Revision 8 of the Waste Isolation Pilot Plant (WIPP) Washington Administrative Code (WAC)).
 - Submittal adjustments to the Annual Transuranic Waste Inventory Report.
- 13.16 Off Site Spent Nuclear Fuel Disposition**
 - o Maintained coordination for offsite Spent Nuclear Fuel Disposition.
- 13.21 Mixed Waste Disposal Trenches (MWT)**
 - o Shipments received:
 - Four Boxes from PFNW to MWT in two shipments.
 - o Surveillances/PMs:
 - 127 surveillances.
- 13.24 MCSC Project**
 - o Performed/Completed:
 - Initiated formal design review for the WESF Modifications and Capsule Storage Area.
 - Identified a CHPRC Project Review Board chairman and established schedule for the review.
- 13.25 Capsules Interim Storage Operations**
 - o Performed/Completed:
 - M-092-05 capsule Disposition milestone: transmitted proposed milestone changes to RL, which will close the capsule disposition milestone.

Project Technical Services (PTS) Support

Operations Program

- o Performed/Completed:
 - Supported lockout/tagout (LOTO) annual assessment of facilities.

Project Delivery

WESF W-130 Stabilization

- o Performed/Completed:
 - Completed construction trailer LOTO, electrical disconnections.

CWC Roof Repairs

- o Performed/Completed:
 - Contract award to Total Site Services (TSS).

MAJOR ISSUES

Issue:

The Washington Department of Ecology issued findings in Inspection Reports for the LLBG Trenches 31-34 and CWC regarding major risk labeling. The findings direct RL and CHPRC to label the containers with the major risks of the dangerous waste contents. CHPRC uses the U.S. Department of Transportation (DOT) Hazard Class labeling system (which includes the use of radiological labels) to comply with the regulatory requirement.

Corrective Action:

Work with RL to obtain agreement from Ecology that CHPRC may use the DOT Hazard Class labeling system, as this complies with the regulatory requirement for a “system in use that performs the function in accordance with local, state, or federal regulations.”

Status:

CHPRC and RL met with Ecology inspectors regarding this item, and the parties agreed to elevate the issue to management for resolution.

Issue:

Potential delayed approval of MDSA Revision 12. This delay will impact T Plant’s ability to complete Readiness Assessment activities in preparation for accelerated receipt of sludge.

Corrective Action:

Comments received from RL on April 2, 2017; CHPRC revised and re-submitted MDSA Revision 12 on May 18, 2017.

Status:

Comments were significant. Comment resolution included re-analysis of numerous accidents contained in the MDSA. Approval and implementation are required prior to declaration of readiness at T Plant. Approval is needed by June 19, 2017, to maintain the accelerated schedule completion of September 30, 2018.

Issue:

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

Corrective Action:

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

Status:

Continuing to use the best demonstrated available technology to provide adequate configuration and minimize the potential for contamination spread during the long-term storage (i.e., protecting boxes with tarps or protective shoring; over packing drums). Streamlining and consolidating existing container management procedures. RL authorized the acceleration of FY2018 TRU commercial repackaging allowing shipments to PFNW for repackaging to resume.

Issue:

Mission Support Alliance, LLC (MSA) Cross-Connection Control Program performed a Health Hazard Level Re-Evaluation following the guidance listed in WAC 246-290-490 and internal MSA Cross-Connection Control procedures. As a result, 225-B (WESF) Health Hazard Level was changed from high to severe, requiring service connections to have cross-connection installed.

Corrective Action:

The WAC requires corrective action to be accomplished “within 90 days of the purveyor notifying the consumer ...” or, “In accordance with an alternate schedule acceptable to the purveyor.” MSA has worked with affected facilities and RL to develop corrective actions that minimize impacts to ongoing cleanup milestones.

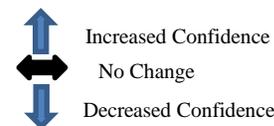
Status:

RL provided direction to MSA to remedy the majority of the issue with a modification at the source by MSA versus modifications at each facility. Description and preliminary schedule for WESF potable water facility modifications required, unless RL approves an alternate (no action) approach transmitted on July 6, 2016 (CHPRC-1602928). A meeting was held with RL on January 12, 2017, to discuss the contractual direction necessary to proceed. Awaiting RL direction for potable water system facility modifications.

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:
 No major changes to the monthly spotlight chart in the month of *May*.

Realized Risks (Risks that are currently impacting project cost/schedule)

<p>WSD-125: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues</p>	<p>A pause in waste processing results in an unexpected container degradation within SWOC (excluding TRU Retrieval activities) and requires additional resources to respond. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$5 million, 0 day</p>			<p>Risk Event: In November 2011, degraded containers were discovered in CWC.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform daily/weekly waste container surveillances to identify container abnormalities.</td> <td rowspan="3">11/01/11</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 showing signs of degradation.</td> <td></td> <td>7/31/17</td> <td>25</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Project continued to perform container surveillances in the month of <i>May</i> to identify container and container cover abnormalities. Twenty-four containers in 2404WC had signs of exterior corrosion that were placed on the watch list and are being scheduled for over pack. The project will initiate development of work package for subsequent movement of Storage Box 75DMA16F3 into 2403WD. The remaining containers will continue to require surveillance and continued enhanced monitoring.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	11/01/11	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 showing signs of degradation.		7/31/17	25
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<p>WSD-143 Safety Classification of SSCs - MDSA Rev. 12</p>	<p>RL approval of the MDSA Revision 12 takes longer than the negotiated assumption planned for in the baseline and/or the safety classification of Systems, Structures, & Components (SSCs) is more conservative than the safety analysis dictates resulting in cost impacts and schedule delays. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$600K 120 days</p>			<p>Risk Event: On 11/28/16, CHPRC submitted letter CHPRC-1604566AR1 - MDSA, REV. 12, the TSR REV. 12, the <i>T PLANT FHA</i>, and the SWOC FHA, Rev. 6. While the baseline plan assumed that RL would review and approve this submittal within 120 calendar days (or by 3/30/17), RL senior management had informally agreed to accelerate review/approval of this submittal within 60 days to facilitate moving all 100K sludge from the 105KW basin to T Plant by 9/30/18. RL transmitted letter 17-NSD-0018_RL to CHPRC on 3/30/17, providing a 35-page Review Comment Record (RCR), with comments that must be resolved prior to resubmitting the updated MDSA & TSR. The updated MDSA/TSR was submitted to RL on 5/18/2017.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Obtain written comments from RL Nuclear Safety Division personnel against the submittal described above.</td> <td rowspan="3">2/19/17</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Conduct interface meetings between RL & CHPRC senior management to ensure MDSA approval challenges are discussed and resolved, if possible, prior to any action that delays approval of the MDSA.</td> <td>As Needed</td> <td>N/A</td> </tr> <tr> <td>Resolve RL NSD Comments (17-NSD-0018_RL) and solicit RL NSD concurrence.</td> <td>6/17/2017</td> <td>0</td> </tr> </tbody> </table> <p>Recovery Action Assessment: CHPRC received letter 17-NSD-0018_RL on 3/30/17 providing 35 pages of comments associated with the MDSA/TSR R12 submittal. CHPRC submitted the updated MDSA/TSR on 5/18/2017 and is currently meeting with RL to resolve comments. Once RL issues a Safety Evaluation Report, CHPRC will proceed with implementation activities. Once CHPRC has dispositioned all RL comments and received confirmation no changes to assume safety classification is needed, this risk may be closed.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Obtain written comments from RL Nuclear Safety Division personnel against the submittal described above.	2/19/17	Complete	100	Conduct interface meetings between RL & CHPRC senior management to ensure MDSA approval challenges are discussed and resolved, if possible, prior to any action that delays approval of the MDSA.	As Needed	N/A	Resolve RL NSD Comments (17-NSD-0018_RL) and solicit RL NSD concurrence.	6/17/2017	0				
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0013/WBS-013																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																			
Lifecycle Risk Triggers (Risk could be realized at any point of the project)																			
WSD-097: Major Equipment Failure - T-Plant	T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$750K, 96 days	●	↔	Risk Trigger Metric: During planned facility operation activities, a suspect system component is discovered that requires attention, or an unexpected malfunction results in this risk being realized. This risk will continue throughout the CHPRC (September 30, 2018).															
				<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify and procure spare parts for T Plant crane.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Identify and procure spare parts for T Plant crane.	Ongoing	N/A									
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WSD-019: MLLW & TRU Treatment Impacts	Mixed low-level waste (MLLW) and TRU treatment capacity/capability does not meet Hanford needs or treatment does not occur as scheduled, resulting in cost impacts. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$2.5 million, 0 day	●	↔	Risk Trigger Metric: Will continue throughout contract (September 30, 2018).															
				<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Establish multiple treatment contracts, or obtain additional capability, for the processing of MLLW and TRU, with terms extending to the end of the current CHPRC contract with RL (i.e. September 30, 2018).</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Continue to work with RL to fund the processing of TRU/M waste at PFNW at a rate that keeps them viable (i.e. keeps the doors open).</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Evaluate the benefit(s) associated with an increase to the PFNW Pu possession limit. Their current limit is 200 grams of total Pu. Increasing the limit may allow additional quantities of TRUM waste to be shipped to PFNW for processing. This evaluation will take place in conjunction with the M-091-52 engineering study.</td> <td>09/30/17</td> <td>10</td> </tr> <tr> <td>Negotiations with RL are ongoing to seek authorization for additional shipments of M-91 Legacy TRUM to PFNW. This would meet the objectives for the Perma-Fix minimum optimal processing volume as identified in the Optimization Study provided to RL in December 2016.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Establish multiple treatment contracts, or obtain additional capability, for the processing of MLLW and TRU, with terms extending to the end of the current CHPRC contract with RL (i.e. September 30, 2018).	Ongoing	N/A	Continue to work with RL to fund the processing of TRU/M waste at PFNW at a rate that keeps them viable (i.e. keeps the doors open).	Ongoing	N/A	Evaluate the benefit(s) associated with an increase to the PFNW Pu possession limit. Their current limit is 200 grams of total Pu. Increasing the limit may allow additional quantities of TRUM waste to be shipped to PFNW for processing. This evaluation will take place in conjunction with the M-091-52 engineering study.	09/30/17	10	Negotiations with RL are ongoing to seek authorization for additional shipments of M-91 Legacy TRUM to PFNW. This would meet the objectives for the Perma-Fix minimum optimal processing volume as identified in the Optimization Study provided to RL in December 2016.	Complete	100
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Mitigation Assessment: 1) MLLW: Two contracts are in place for offsite commercial waste treatment, which provided sufficient capability/capacity to meet current MLLW treatment needs through the end of the CHPRC contract term. However, one of the contracts was recently restricted due to the closure of a Perma-Fix treatment facility in Tennessee (M&EC). Additional capability will now need to be obtained to meet all anticipated MLLW treatment needs. TRU/M: Only PFNW has current capability to process TRU/M waste. This is due solely to the practical limitations imposed by the need to ship the TRU/M waste via road-closure; therefore, additional commercial providers cannot be obtained. 130 m ³ of Legacy M -91 TRUM waste was authorized by DOE at the start of FY2017, and has now been shipped and completed. The project has received approval for authorization for additional shipments, allowing for the shipment of four oversized TRU waste packages from CWC to PFNW supporting PFNW's minimum optimal processing volumes, along with the projected PFP oversized TRU waste components that are forecasted to be shipped to PFNW this fiscal year.																			
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
Lifecycle Risk Triggers (Risk could be realized at any point of the project)																			

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0013/WBS-013													
WSD-137: OPP: Planned Efficiencies	Funding profile for the contract period are achieved through efficiencies. Risk Handling Strategy: Exploit Probability: Likely (75% to 90%) Worst Case Impacts: \$32 million, 0 day	●	↔	<p>Risk Trigger Metric: Will continue throughout project lifecycle (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Opportunity action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Plan work activities and procurements to be as efficient as possible with minimal resources.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Opportunity Assessment: The project has realized efficiencies of approximately \$74.9 million to date. Future efficiencies are being offset due to discrete project overruns, increased regulatory scrutiny, maintenance lessons learned across CHPRC DOE Complex, and heightened compliance postures. Also note that the EAC currently contains work identified as changed scope for which contract changes would be issued.</p>	Opportunity action(s)	FC Date	%	Plan work activities and procurements to be as efficient as possible with minimal resources.	Ongoing	N/A			
Opportunity action(s)	FC Date	%											
Plan work activities and procurements to be as efficient as possible with minimal resources.	Ongoing	N/A											
WSD-140: As-Found-Unknown Conditions - T Plant	Unknowns, as found or emergent conditions impact the operability of the T Plant facility. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$990K, 0 days	●	↔	<p>Risk Trigger Metric: This risk has been triggered due to the current condition of 221-T Dock #2.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Repairs to 221-T Dock #2 in support of sludge receipt</td> <td>09/11/2017</td> <td>0</td> </tr> <tr> <td>Submittal of a BCR to break out the planning package planned for May.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of May. Deterioration of the steel decking and steel support structure for 221-T Dock #2 has required that the dock be taken out of service. A new loading dock is necessary, as one of the Life Safety Code required emergency egress points and to support the receipt of sludge. This dock also provides storage areas for various gas bottles. The risk is being captured for visibility and will remain as part of the key risks until this issue is resolved.</p>	Mitigation action(s)	FC Date	%	Repairs to 221-T Dock #2 in support of sludge receipt	09/11/2017	0	Submittal of a BCR to break out the planning package planned for May.	Complete	100
Mitigation action(s)	FC Date	%											
Repairs to 221-T Dock #2 in support of sludge receipt	09/11/2017	0											
Submittal of a BCR to break out the planning package planned for May.	Complete	100											
FY2017 Risk Triggers (Risk could be realized in FY2017)													
WSD-W135-15: Utilization of 2003 Pre-Conceptual Design	A pre-conceptual design for the dry storage of the capsules was completed in July 2003. If this design cannot be utilized, it will be necessary to initiate and complete a new conceptual design, including a new analysis of alternatives. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$5,100K, 0 days	●	↔	<p>Risk Trigger Metric: The 2003 pre-conceptual design for the dry storage of capsules cannot be utilized.</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 changes in the month of May. The 2003 pre-conceptual design is based on design criteria that is over 13 years old. Design criteria that impacts the ability to utilize the 2003 pre-conceptual design include: location of the Dry Storage Facility, duration of the storage period, Safety Basis Requirements and Environmental Permitting. Continuing to have discussions with RL can clarify impacts of the Safety Basis Requirements and Environmental permitting. The risk is being captured for visibility and will remain as part of the key risks until this issue is resolved.</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-W135-16: Content and Approval of Critical Decision Packages	The content of the Critical Decision packages required by DOE O 413.3B are more extensive than anticipated and require an extensive RL review. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$2,000K, 0 days	●	↔	<p>Risk Trigger Metric: The content and review/approval process for the Critical Decision Packages is impacted by DOE O 413.3B.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Prepare joint tailoring strategy with RL on how to meet the DOE O 413.3B requirements</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of May. The pre-conceptual design of the project was based on DOE O 413.3A; the current version is DOE O 413.3B, change 2. New requirements will impact the content of the critical decision packages or impact the duration and extent of the RL review. Working closely with RL on the tailoring strategy to meet the DOE O 413.3B requirements. The risk is being captured for visibility and will remain as part of the key risks until this issue is resolved. No further mitigation actions are necessary at this time.</p>	Mitigation action(s)	FC Date	%	Prepare joint tailoring strategy with RL on how to meet the DOE O 413.3B requirements	Complete	100			
Mitigation action(s)	FC Date	%											
Prepare joint tailoring strategy with RL on how to meet the DOE O 413.3B requirements	Complete	100											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments		
		Month	Trend			
RL-0013/WBS-013						
WSD-W135-17: Modifications to WESF	The transfer of the capsules to dry storage will require modifications to the WESF. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$7,300K, 0 days			Risk Trigger Metric: Modification to the WESF facility are required for transfer of capsules to dry storage.		
				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Mitigation action(s)</th> <th style="text-align: left;">FC Date</th> <th style="text-align: left;">%</th> </tr> </thead> <tbody> <tr> <td colspan="3">None identified at this time.</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date
Mitigation action(s)	FC Date	%				
None identified at this time.						
Mitigation Assessment: No changes in the month of <i>May</i> . The approach incorporated into the pre-conceptual design for the transfer of the capsules, required minimal modifications to the WESF. New or updated requirements will require more extensive modifications to the WESF. Before submittal of CD-1, CHPRC will review 30 percent design from subcontractor, which will provide details of WESF modifications. The risk is being captured for visibility and will remain as part of the key risks until this issue is resolved.						
Unassigned Risks (Pending ownership of identified risks/opportunities)						
No unassigned risks identified in the month of <i>May</i> .						

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	7.3	7.3	6.9	(0.1)	-0.7%	0.4	5.2%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$0.1M/-0.7%)

The current month schedule variance is within threshold.

CM Cost Performance (+\$0.4M/+5.2%)

The current month schedule variance is within threshold.

Contract-to-Date (CTD)

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	1,157.0	1,155.0	1,080.0	(1.9)	-0.2%	74.9	6.5%	1,345.6	1,297.7	47.9

Numbers are rounded to the nearest \$0.1 million

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

The CTD schedule variance is within threshold.

CTD Cost Performance (+\$74.9M/+6.5%)

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

Variance at Completion (+\$47.9M/+3.6%)

The Variance at Completion is within threshold.

Contract Performance Report Formats are provided in Appendix A

FUNDS vs. SPEND FORECAST (\$M)

FY2017			
WBS 013/RL-0013 Waste and Fuels Management Project	Projected Funding	Spending Forecast	Variance
Spending Forecast	112.1	92.7	19.5
Incremental Scope Pending Change Management	0.0	2.7	(2.7)
RL-0013 – Total	112.1	95.4	16.8

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2017 projected funding for Project Breakdown Structure (PBS) RL-0013 of \$112.1 million was increased this month based on RL funding guidance. The total fiscal year spend forecast (FYSF) of \$95.4 million was reduced by approximately \$0.5 million from last month. It was primarily attributed to IDF work deferrals due to resource availability.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-091-03K	Submit Revision of TRUM Waste and MLLW PMP to Ecology.	6/30/17		6/30/17	On schedule
M-092-05	Determine Disposition Path and Establish Cs/Sr Interim Milestones.	6/30/17	5/8/17	6/30/17	On schedule
M-091-52	Submit change request with target dates for new/modified capabilities to process TRUM waste.	9/30/17		8/30/17	On schedule

C-026-07L	Tritium Treatment Technology Developments to Ecology and EPA.	3/31/18		3/29/18	On schedule
M-091-03L	Submit Revision of TRUM Waste and MLLW PMP to Ecology.	6/30/18		6/30/18	On schedule

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 PFNW locations. RL is the authorized shipper and acts as signatory on the shipping papers, and ensures DOE Manual 460.2-1 is complied with. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) level VI vehicle inspections and verifies that the government drivers meet the applicable DOT Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or TSD requirements.	Ongoing
J.12/C.2.3.6	PBS-RL-0013, Transuranic Waste Certification	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the CBFO.	No WIPP shipments are planned within the contract period of performance.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	RL Due Date
RL Review and Approve MDSA and Technical Safety Requirement (TSR) Rev. 12 (original submittal)	11/29/16 (A)	05/01/17
RL Review and Approve MDSA and Technical Safety Requirement (TSR) Rev. 12 (with RL comments incorporated)	05/18/17 (A)	06/19/17

Section D

Soil and Groundwater Remediation Project (RL-0030)



J. D. Rendall
Vice President and
Project Manager for
Soil and Groundwater
Remediation Project

M. A. Wright
Vice President for
Project Technical
Services

May 2017
CHPRC-2017-05, 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 treatment and well drilling (including development) completed in the current month 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	37.1	262.2	2.6	23.8						
HX P&T	43.8	237.7	2.1	17.3						
KR-4 P&T	13.9	102.8	0.1	1.1						
KW P&T	11.2	14.7	2.1	2.9						
KX P&T	37.3	285.52	2.1	16						
200 West P&T	88.2	606.8	9.2	53.4	146	1169	.25x10 ¹²	1.43x10 ¹²	29	85
Combined	231.5	1509.8	9.2	114.3	146	1169	.25x10¹²	1.43x10¹²	29	85
FY2017 KPG	--	2200	--	160	--	1700	--	N/A	--	45

Well Drilling by Area	FY2017 Planned	Current Month	FY2017 Cumulative
100-KR-4	5	-	1
100-HR-3	6	-	-
200-UP-1	10	-	7
200-ZP-1	5	-	-
M-24 Milestone	5	-	-
300 Area	67	29	67
200-DV-1	5	2	2
Total Wells	103	31	77
Site Wide Boreholes	*4	-	-

*FY2017 planned site-wide borehole total decreased from 34 to 4. The 200-DV-1 shallow soil characterization work is now planned for FY2018.

EMS Objectives and Target Status

Objective #	Target	Actions	Due Date	Status
17-EMS-SGWR-OB1 Monitor and confirm low carbon tetrachloride emissions at the 200 West P&T Facility	T1 – Evaluate treated off gas analytical results from compliance sampling and process sampling each quarter.	Monitor and confirm low carbon tetrachloride emissions at the 200 West P&T Facility.	9/30/17	50%

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	NA
Total Recordable Injuries	0	0	NA
First Aid Cases	1	46	5/15/2017 – While replacing hydraulic press dye fittings, the dye disassembled and fell on the employee’s ankle. The employee and manager agreed to self-treat after noticing a small abrasion. On the afternoon of 5/18/2017, the employee noticed the ankle was swollen and still had pain. The employee went to HPMC for evaluation and was released to work with no restrictions. (24464) *9 FA cases, PTS in support of RL-0030.
Near-Misses	0	0	NA

KEY ACCOMPLISHMENTS

RL-0030 Accomplishments

RL-0030.01 RL 30 Operations

Environmental Integration

- Reviewed and formatted over 10,000 chronological 100-D/H references for Record of Decision Administrative Record Index.
- Received approval from the Hanford Site Groundwater/Vadose Zone Executive Council of the Summary Analysis for the Hanford Site Composite Analysis update. This enables the project to proceed into the analysis phase with an approved technical approach.

River Corridor

- Submitted the draft Hanford Site Groundwater 100 Area Pump and Treat Report for 2016 to RL for review on May 15, 2017.

100-KR-4 Operable Unit (OU)

- Completed drilling at two monitoring well locations and initiated drilling at two more in support of fiscal year (FY) 2017 optimization.

100-NR-2 OU

- Completed CHPRC closure certification for the 1301 and 1325 Dangerous Waste Management Units based on groundwater sampling results. The closure documents are with Ecology for final approval before going to public comment for the Class II Permit Modification.
- Injected herbicide into the first of several mulberry trees located on the riverbank. Due to high river conditions, the remainder of the injections will have to wait until the water level subsides.
- Initiated the cultural resource review for barrier reinjection. The Area of Potential Effects letter has been prepared and is undergoing State Historic Preservation Officer (SHPO) and Tribal review. The field inspection of the area is being scheduled with the Tribes.

300-FF-5 OU

- Completed drilling all 67 injection and monitoring wells in support of the Stage B Uranium Sequestration.

Central Plateau

- Submitted the draft Hanford Site Groundwater 200 Area Pump and Treat Report for 2016 to RL for review on May 15, 2017.

200-UP-1 OU

- Initiated well construction activities for the additional uranium extraction well (299-W19-125).
- Began drilling well 699-30-70 on May 16, 2017, which is the first of four additional southeast chromium characterization wells.

200-BP-5/200-PO-1 OU

- Addressed and incorporated RL comments on the 200-BP-5 Removal Action Work Plan (RAWP) for transmittal to RL on May 25, 2017.

200-WA-1 and 200-BC-1 OUs

- Initiated meetings to review and incorporate lessons learned from 200-DV-1 characterization project into the 200-WA-1 and 200-BC-1 Remedial Investigation/Feasibility Study Work Plan.

200-EA-1 OU

- Initiated CHPRC internal review of the Remedial Investigation/Feasibility Study Work Plan Appendix C, Risk Characterization Methods and Parameters, on May 15, 2017.

200-DV-1 OU

- Began drilling on May 17, 2017, in a phased approach at 200-DV-1 OU for the remaining four deep boreholes. Phase I – sonic drilling with grab samples (shallow drilling); Phase II – Becker-Hammer push through potential high-radiologically contaminated zone; and Phase III – Sonic drilling with continuous core sample collection.
- Completed drilling five wells at the Uranium Reactive Gas Sequestration (URGS) Treatability Test site on May 3, 2017, reaching approximately 80 feet below ground surface (bgs) for each well. Construction of monitoring well, C9519, was completed May 18, 2017.

200-ZP-1 OU

- Drilling continues on the four injection well campaigns using two drill rigs. The first injection well [C9564 (YJ-31)] reached the total depth, and construction will begin on May 23, 2017. Drilling on the second injection well [C9563 (YJ-32)] reached a depth of 336 feet bgs, against a target of 490 feet bgs.

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

- Operated the 200 West P&T at an average of 1,976 gallons per minute (gpm).
- Completed the fluidized bed reactor (FBR)-A recovery process.

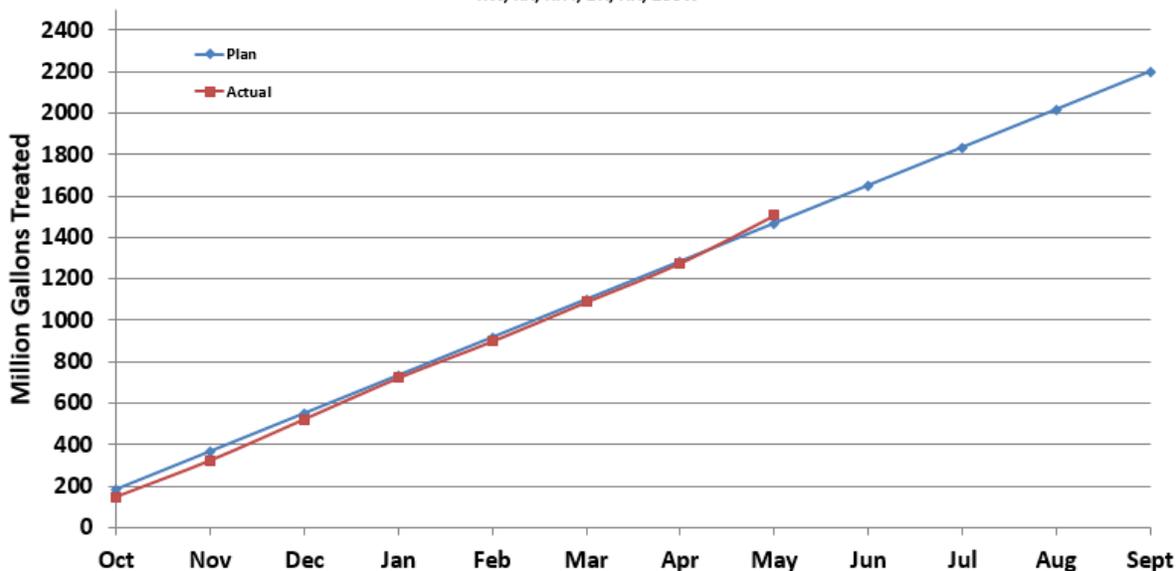
100 Area P&Ts

- Operated the DX P&T at 831 gpm, above the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 311 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 251 gpm, below the facility capacity of 330 gpm. Work activities continue to return KW to full flow and are expected to be completed in early June.
- Operated the KX P&T at 836 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at maximum extraction well capacity. Monthly average at 981 gpm.

Project Technical Services (PTS) Accomplishments

- **Engineering Services**
 - o Provided technical assistance to 200 West Pump & Treat in replacing parts of the vessel off-gas system ducting due to corrosion.
- **Training and Procedures**
 - o Implemented course #290225 Cultural Sensitivity for Soil and Groundwater Remediation Project (S&GRP) Teamsters, Carpenters, Material Handlers, and Waste Nuclear Chemical Operators.
 - o Developed a presentation for Uranium Sequestration Phase B.
- **Project Delivery**
 - o Received and mobilized 4,400 feet of double wall high-density polyethylene for 200-UP-1 pipeline construction.
 - o Awarded contract to DGR Grant Construction Inc. for Waste Sampling and Characterization Facility (WSCF) restroom trailer.

FY2017 P&T Operations
Pump & Treat Performance - Cumulative
 KW, KX, KR4, DX, HX, 200W



200 West P&T

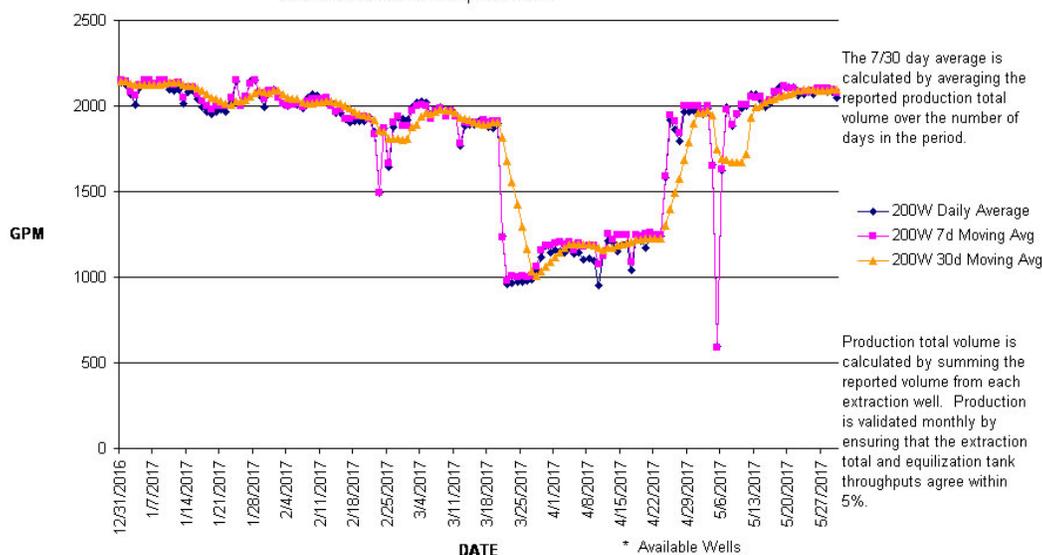
2W EXTRACTION WELLS AVERAGE DAILY FLOW RATES

Current GPM = 2078 Capacity = 2078 / 2500 = 83% *

30d Average GPM = 1960 Capacity = 1960 / 2500 = 79% *

7d Average GPM = 2094

Data validated thru last completed month



MAJOR ISSUES

Issue:

Experiencing regulatory agency delays in the approval of decision documents, including:

- 200-BP-5 Remedial investigation (RI)/200-PO-1 RI Addendum delayed due to Ecology review.
- 200-IS-1 RI/Feasibility Study (FS) Work Plan delayed due to formal dispute.
- 100-BC-5 RI/FS and Proposed Plan (PP) delayed due to EPA review.

Corrective Action:

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

Status:

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

- 200-BP-5/200-PO-1 RI: Ecology suspended review of the 200-BP-5 RI report and the 200-PO-1 RI report addendum on October 23, 2015, (15-NWP-189), pending resolution of the Central Plateau modeling approach. The modeling approach was resolved based on Ecology's letter (16-NWP-220), dated December 28, 2016. RL sent a letter to Ecology (17-AMRP-0114) on March 20, 2017, requesting comments be provided within 45 days in accordance with the Tri-Party Agreement. Ecology stated during the Project Manager's Meeting that comments would be provided by July 31, 2017.

- 200-IS-1 RI/FS Work Plan: Ecology has stopped review of change package C-13-01 due to disagreement regarding treatment, storage, and disposal (TSD) determinations and associated criteria.

On October 20, 2016, RL provided the updated Change Package C-13-01 and four other change packages to better align the waste sites within the 200-IS-1 OU and several other OUs, to Ecology for review/approval. This topic was discussed during the January 4, 2017, Senior Executive Council meeting; RL and Ecology attorneys continue working to reach an agreement with an anticipated resolution date of June 30, 2017. Dispute resolution was formally extended to June 30, 2017, via Change Control Form M-15-13-02. No change. Topic will be discussed during the June 15, 2017, Interagency Management Integration Team (IAMIT) meeting.

- 100-BC-5 RI/FS and PP: EPA comments on the Draft A RI/FS and PP were due January 31, 2017. EPA has indicated that comments will be provided by June 20, 2017.

Issue:

Completion of Cultural Resource Reviews (CRRs) are delayed due to 1) significant snow accumulations that delayed the archeological field surveys or 2) issuance of the Memorandum of Agreement with the Tribes. The impacted CRRs include:

Snow impacted:

- 100-HR-3 wells/conveyance lines delayed since December 14, 2016. Archeological surveys completed February 28, 2017. Final CRR projected to be completed by June 20, 2017.
- 200-UP-1 monitoring well delayed since December 20, 2016. Archeological survey completed on March 2, 2017. Final CRR projected to be completed by June 5, 2017.

Memorandum of Agreement (MOA) impacted:

- 100-KR-4 well conveyance lines.
- 100-HR-3 well conveyance lines.

Corrective Action:

Conduct the archeological field survey as soon as snow conditions allow and then expedite actions to prepare draft CRRs. Closely monitor and assist Mission Support Alliance, LLC (MSA) progress on completion of the CRRs.

Status:

Archeological field surveys for 200-UP-1 and 100-HR-3 are complete and the final CRRs are expected in late-June. The final MOA for 100-KR-4 was provided to the Yakama Nation for signature on April 13, 2017. Yakama Nation has agreed to sign the MOA, which is anticipated to be approved by late June. The first workshop for the 100-HR-3 MOA was held with the Yakama Nation on April 18, 2017. Currently, neither of these MOAs are approved.

Notified RL via letter CHPRC-1701319 on April 4, 2017, that successful completion of PM-30-1-17 Maximize plume containment and remediation utilization has been jeopardized by delays to these well drilling and alignment CRRs. Once the CRRs are approved, CHPRC will quantify the impacts and notify RL.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
Explanation of major changes to the project monthly spotlight chart: No major changes to the risk spotlight chart in the month of <i>May</i> .										
Realized Risks (Risks that are currently impacting project cost/schedule)										
OPPORTUNITY: SGW-007A: Sampling Requirement Reduction	Reduction in field sampling (locations, frequency, or total number of samples collected) has the opportunity to reduce long-term groundwater monitoring cost. Risk Handling Strategy: Exploit Probability: Very Likely (>90%) Worst Case Impacts: \$500K, 0 day			<p>Opportunity Event: The <i>Optimization Plan to Revise the Groundwater Sampling Plan</i> is final and provides the roadmap to revise the groundwater monitoring SAPs over the next two years.</p> <table border="1"> <thead> <tr> <th>Opportunity action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Obtain Agency approval of the revised SAPs.</td> <td>TBD</td> <td>97</td> </tr> </tbody> </table> <p>Note: 34 of the planned 35 SAP revisions have been completed (97%).</p> <p>Opportunity Assessment: All 10 CERCLA groundwater monitoring SAPs have been revised and transmitted to RL and the regulators. Nine of the SAPs are approved and implemented. A path forward to complete the 200-PO-1 SAP is being developed to incorporate the lessons learned from the 200-BP-5 SAP that was recently approved. The forecast (FC) date will then be updated to reflect the new completion date based on the path forward. Once all SAPs are complete, this opportunity will be closed.</p> <p>All 25 RCRA monitoring plans have been revised and are complete in accordance with the <i>SAP Optimization Plan to Revise the Groundwater Sampling Plan</i>.</p>	Opportunity action(s)	FC Date	%	Obtain Agency approval of the revised SAPs.	TBD	97
Opportunity action(s)	FC Date	%								
Obtain Agency approval of the revised SAPs.	TBD	97								
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No critical risks identified in the month of <i>May</i> .										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
No high risks identified in the month of <i>May</i> .										
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of <i>May</i> .										

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	14.1	9.7	8.4	(4.5)	-31.7%	1.3	13.0%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (-\$4.5M/-31.7%)

The negative schedule variance resulted from the following:

- Delay of the 100-NR-2 Barrier maintenance and expansion activities, which were scheduled to start in FY2016, but were deferred due to funding limitations and pending resolution of cultural clearance items. Some cultural clearance and other planning activities are forecast to complete in FY2017, with fieldwork initiating in FY2018.
- Positive performance earned in prior periods (work acceleration) for 200-PO-1 NRDWL, 100-HR-3 optimization, 300-FF-5 Stage B monitoring and 200-UP-1 SE chrome plume characterization drilling campaigns, 100-HR-3 D&D, and 100-HR-3 well realignments, and calendar year (CY) 2016 P&T reports for 100 and 200 Area is returning to zero by the end of FY2017.

CM Cost Performance (\$1.3M/13.0%)

The positive cost variance resulted from the following:

- The closure of WSCF Labs and the subsequent transition to offsite laboratories have resulted in significantly lower costs. In May, sampling labor cost was lower as a result of the site closure due to the PUREX incident.
- The 200W P&T plant flow was slowed down for the FBR repair, which caused a reduced chemical demand, and chemicals already on-hand were consumed during the startup.

Contract-to-Date (\$M)

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	1,378.9	1,348.1	1,313.1	(30.8)	-2.2%	35.1	2.6%	1,567.2	1,510.8	56.3

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$30.8M/-2.2%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$35.1M/+2.6%)

The variance is within reporting thresholds.

Variance at Completion (+\$56.3M/+3.6%)

The variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0030 Soil and Groundwater Remediation	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	126.6	108.3	18.3
Incremental Scope Pending Change Management	0.0	12.5	(12.5)
RL-0030 –Total	126.6	120.7	5.8

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

FY2017 revised budget guidance received from RL reflects expected funding of \$126.6 million for project breakdown structure (PBS) RL-0030. The fiscal-year spending forecast (FYSF) of \$120.7 million includes actions anticipated to achieve funding targets. In the past month, the spending forecast decreased with the deferral of the 300-FF-5 Stage B injections to FY2018.

Critical Path Schedule

Critical path analysis can be provided upon request.

MILESTONE STATUS

Tri-Party Agreement milestones represent significant achievements in project execution. Enforceable Tri-Party Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key activities. The performance measurement baseline (PMB) Annual Update, implemented in September 2013, and subsequent approved baseline change requests (BCR) define CHPRC planning with respect to Tri-Party Agreement milestones. A Tentative Agreement for Tri-Party Agreement milestone series M-015, M-016, M-037, M-085, and M-094 was signed on October 26, 2015, and the final approval package was signed on May 25, 2016. 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 in Dispute					
M-015-112	Submit Draft B, 200-IS-1 OU Pipeline System Waste Sites RFI/CMS/RI/FS Work Plan to Ecology	2/28/14		TBD	Dispute resolution extended to June 30, 2017.
Milestones on Schedule or at Risk					
M-024-58J	Initiate Discussions of Well Commitments	6/1/17		6/1/17	On schedule
M-024-68-T01	Conclude Discussions of Well Commitments	8/1/17		8/1/17	On schedule
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	9/30/17		6/5/18	An extension to the due date is being requested to continue implementation of the collaborative scoping process

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	RL Due Date
RL Review of the Draft 100 Area P&T Report	5/15/17 (A)	6/14/17
RL Review of the Draft 200 Area P&T Report	5/15/17 (A)	6/14/17
RL Transmit Draft A 200-BP-5 Removal Action Work Plan to Regulators for Review	5/25/17	5/31/17
RL Review Draft 200-WA-1 Waste Control Plan	6/28/17	7/13/17
RL Review Decisional Draft 100-HR-3 Remedial Design/Remedial Action Work plan	7/21/17	8/19/17
RL Review Decisional Draft B 200-UP-1 Remedial Design/Remedial Action Work Plan	8/30/17	9/29/17
RL Review Decisional Draft B 200-ZP-1 Remedial Design/Remedial Action Work Plan	8/30/17	9/29/17

Section E

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



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

On May 9, 2017, the Plutonium Uranium Extraction Plant (PUREX) Tunnel 1 partially collapsed. Initial emergency recovery efforts included a partial backfill and placement of a temporary cover. Planning is underway for a permanent resolution for Tunnel 1 and investigation of Tunnel 2 and other similar aging structures.

EMS Objectives and Target Status

None currently identified.

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	1	12	5/9/2017 - Employee tripped over backpack on floor and twisted back. (24454)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0040 Accomplishments

PUREX Tunnels

- Placed temporary cover over the 20-by-20 foot breach in PUREX Tunnel 1.
- Performed backfill of Tunnel breach.
- Provided support to the Department of Ecology’s Administrative Order deliverables.
 - o Performed causal analysis.
 - o Evaluated structural integrity of Tunnel 1.
 - o Evaluated risk of further collapse of Tunnel 1.

PUREX Tank V-11-10-1

- Size reduced and packaged the piping that was previously removed from the PUREX tank V11-10-01.
- Performed additional mockup activities as an input to the tank pumping activities, including verifying the valving arrangements, testing the submersible pump with the manifold assembly, and finalizing the hose transfer process and water/absorbent ratios.
- Started routing the V11-10-1 tank pumping work package for approval, prior to the Hazard Review Board (HRB) review.
- Conducted a pre-HRB work package review; incorporated identified comments in to the work package and As Low As Reasonably Achievable (ALARA) management worksheet (AMW).

- Received and tested new batch of Waterworks absorbent to verify that it meets the functionality requirements of the project; newest batch reacts similar to older product that fully absorbed the liquid in the mockup tests.

PUREX Stack Sampling System Replacement – Detailed Design

- Design contractor finished incorporating CHPRC and RL comments into the 90 percent design package for the replacement PUREX stack sampling system.
- Started verification of the final design package.
- Started developing a draft Construction Scope of Work (SOW) and cost estimate for the construction phase of the system demo/installation.

B Plant Pre-filter and HEPA Filter Change-out

- Finalized a methodology for inspecting the filter banks and ducting for water.
- Developed the waste planning checklist for the B Plant pre-filter and water removal work package.
- Resolved technical questions on how to capture and package water from the ACT002 bank and connecting ducting.
- Continued revising the pre-filter removal work package, AMW and radiological work permit (RWP) to incorporate the additional water removal activities; started review and comment cycle.

Continued Progress on Canyon Stabilization Documents

- Transmitted DOE/RL-2016-50 Draft A, Tier 2 Miscellaneous Facilities Removal Action Work Plan (RAWP) to RL.
- DOE/RL-2017-06 reduction and oxidation (REDOX) RAWP Decisional Draft near Completion.
- Transmitted DOE/RL-2017-37 Draft A, 2716-B Sampling and Analysis Plan (SAP) to RL.
- REDOX SAP Appendices C-I Decisional Draft in CHPRC Review.
- Transmitted DOE/RL-2017-05 Draft A, REDOX Sampling and Analysis Plan (SAP) with Appendices A-B to RL.
- DOE/RL-2016-16 PUREX Engineering Evaluation (EE)/Cost Analysis (CA) Decisional Draft in CHPRC Review.
- DOE/RL-2017-33 224B RAWP Decisional Draft near CHPRC Interval Review.
- DOE/RL-2017-34 224B SAP Decisional Draft near CHPRC Interval Review.

REDOX Risk Mitigation

- Completed Central Plateau Surveillance and Maintenance (CPS&M) Facility Emergency Hazards Identification Checklist (FEHIC) training for all but one of the newly acquired craft team members.
- Completed REDOX accessibility change over preparations for seven of the 22 newly acquired craft team members.
- Completed sample gallery Walk Down Work Package review with Subject Matter Experts and assigned supporting document actions.

REDOX Roof

- REDOX Roof Progress
 - o 15 percent complete, with core drilling for pinning south wall and installation of steel.
 - o Currently 95 percent completed on removal of roof rock and liner.
 - o Completed 75 percent of south side rebar scanning for roof pinning and installation.
 - o Completed steel erection work package HRB.

MAJOR ISSUES

Issue:

As a result of the PUREX Tunnel 1 collapse CHPRC received a notification on May 10, 2017, from the Department of Ecology of an Administrative Order which CHPRC must comply. As part of the Administrative Order, there are the following Corrective Actions.

Corrective Action:

- Identify and implement recovery actions associated with the collapsed PUREX Tunnel 1.
- By July 1, 2017, submit to the Department of Ecology, Nuclear Waste Program a structural integrity evaluation for both PUREX Storage Tunnels 1 and 2.
- By August 1, 2017, submit a draft report detailing the corrective actions to ensure the safe storage of the waste in the PUREX Storage Tunnels 1 and 2 to the Department of Ecology, Nuclear Waste Program for comment and approval.
- By October 1, 2017, submit a draft permit modification to the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion Revision 8C to modify the permit.

Status:

In the month of May teams completed recovery actions associated with the collapsed PUREX Tunnel 1 by filling partial collapse with sand and rock and placing a temporary cover over the site.

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 spotlight chart: D4-042, <i>Unexpected Site Conditions D4</i> , was added as a Realized Risk for the month of May.												
Realized Risks (Risks that are currently impacting project cost/schedule)												
WSR-202S-02: REDOX – Inclement Weather	Inclement weather, including moderate winds, low or high temperatures, heavy rain, or thunderstorms will impact the REDOX roof replacement. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0K, 32 day			Risk Event: For the duration of February through May, the REDOX roof construction activities were impacted by high wind and other weather events –4 more weather delays were experienced in May. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Crews working overtime to support schedule recovery.</td> <td>Multiple</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Recovery Action Assessment: CHPRC has realized cost and schedule impacts resulting from inclement weather conditions through the months of February through May. Schedule and cost impacts continue to be documented and projected. CHPRC has and continues to perform all actions that may mitigate impacts; including things such as changing working hours to avoid heat delays. However, weather delays are difficult to forecast and mitigate. CHPRC plans to capture any scope and cost changes resulting from the weather delays in the TCoPD submittal for the corresponding change proposal (CP 040 311 1625).	Risk recovery action(s)	Risk Date	FC Date	%	Crews working overtime to support schedule recovery.	Multiple	Ongoing	N/A
Risk recovery action(s)	Risk Date	FC Date	%									
Crews working overtime to support schedule recovery.	Multiple	Ongoing	N/A									

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																	
		Month	Trend																		
RL-0040/WBS-040																					
D4-042: Unexpected Site Conditions - D4	<p>Unexpected site conditions are encountered during D4 activities, resulting in schedule delays.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (25% to 74%) Worst Case Impacts: \$0K, 130 day</p>	●	↓	<p>Risk Event: The B Plant ventilation system was shut down due to elevated differential pressure readings in the ACT002 filter bank. Upon initial investigation, it was determined that the pre-filters were saturated with water and there was standing water within the ACT001 filter bank. The result of this unexpected occurrence is that the pre-filters and HEPA filters in the ACT002 bank and presumably the pre-filters and the HEPA filters in the ACT001 filter bank need to be replaced prior to startup of the B Plant ventilation system. Unexpected radiological contamination identified within/outside the containment tent used to initiate the pre-filter change out has resulted in further delays to the filter replacement/system startup. Additional delays are being incurred due to delays from the HEPA filter manufacturer.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Work Package WCNs are being prepared to perform additional investigation of the water intrusion, remove the pre-filters and HEPA filters, and restart the B Plant ventilation system.</td> <td rowspan="4" style="text-align: center;">Aug 2016</td> <td style="text-align: center;">07/11/2017</td> <td style="text-align: center;">60%</td> </tr> <tr> <td>Recovery actions were performed in April and May 2017 to fix contamination associated with ACT002 in and around the containment tent.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100%</td> </tr> <tr> <td>Requests to expedite the HEPA filter order have been rejected by the manufacturer due to issues with their equipment at the production facility.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100%</td> </tr> <tr> <td>Execute pre-filter and HEPA filter change out.</td> <td style="text-align: center;">8/29/2017</td> <td style="text-align: center;">0%</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Engineering evaluation of the water intrusion has been completed. The most likely cause, condensate buildup, was identified as the most likely source of water; however, this assumption cannot be confirmed. Evaluation of the extent of water intrusion within the two ACT filter banks and connecting ducting will be performed during the pre-filter removal activities scheduled to be performed in July 2017. HEPA filters will be replaced once the new filters are manufactured, tested at the off-site filter testing facility and shipped to Hanford; current ETA for the new HEPA filters is early August. Once the pre-filters and HEPA filters are replaced in both ACT filter banks the ventilation system will be restarted. The system will be monitored closely to identify any increases in differential pressure and/or elevated radiation levels that would be leading indicators that water is accumulating in the system again.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Work Package WCNs are being prepared to perform additional investigation of the water intrusion, remove the pre-filters and HEPA filters, and restart the B Plant ventilation system.	Aug 2016	07/11/2017	60%	Recovery actions were performed in April and May 2017 to fix contamination associated with ACT002 in and around the containment tent.	Complete	100%	Requests to expedite the HEPA filter order have been rejected by the manufacturer due to issues with their equipment at the production facility.	Complete	100%	Execute pre-filter and HEPA filter change out.	8/29/2017	0%
Risk recovery action(s)	Risk Date	FC Date	%																		
Work Package WCNs are being prepared to perform additional investigation of the water intrusion, remove the pre-filters and HEPA filters, and restart the B Plant ventilation system.	Aug 2016	07/11/2017	60%																		
Recovery actions were performed in April and May 2017 to fix contamination associated with ACT002 in and around the containment tent.		Complete	100%																		
Requests to expedite the HEPA filter order have been rejected by the manufacturer due to issues with their equipment at the production facility.		Complete	100%																		
Execute pre-filter and HEPA filter change out.		8/29/2017	0%																		
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																					
No critical risks identified in the month of May .																					

High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)

<p>D4-064: Aging Building Systems/ Components</p>	<p>Problems with aging building systems/ components (e.g., roofing/structures, etc.) result in inoperability or requires unscheduled maintenance/outages, resulting in cost impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%) Worst Case Impacts: \$2 million, 0 day</p>			<p>Risk Event: During routine surveillance activities, unforeseen events cause systems to be compromised. This is a lifecycle risk and will continue through the CHPRC contract period (September 30, 2018). This risk was realized in March due to increased future maintenance costs; however, a BCR was implemented to utilize MR, and the risk has since been recovered from.</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>Recovery Assessment: A pre-conceptual design has been provided to RL with an estimate for a like replacement of the entire PUREX stack sample system. CHPRC was provided a Not to Exceed (NTE) to complete a detailed design package for the system and to start demolition and installation activities; however, it is expected the NTE amount will be expended early on during construction. The detailed design package for the replacement system was accepted in May 2017; stamped/signed copies of the package will be received in early June. Construction planning will continue throughout the remainder of FY17 with intent to award the construction contract for installation at the start of FY18.</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								

Unassigned Risks (Pending ownership of identified risks/opportunities)

No unassigned risks identified in the month of May.

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	2.2	2.1	3.0	(-0.2)	-8.5%	(-0.9)	-45.4%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance: (-\$0.2M/-8.5%)

The schedule variance is within reporting thresholds.

CM Cost Performance: (-\$0.9M/-45.4%)

The unfavorable cost variance in the CM is due to:

- Initial recovery actions in response to the partial collapse of PUREX Tunnel 1. The costs include direct labor and subcontract support for placement of the temporary cover and backfill.

Contract-To-Date

(\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	440.6	435.1	406.1	(5.5)	-1.2%	29.0	6.7%	484.3	457.5	26.8

Numbers are rounded to the nearest \$0.1 million

Cost to date (CTD) Schedule Performance: (-\$5.5M/-1.2%)

The schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$29.0M/+6.7%)

The favorable cost variance is due to prior year activity, including:

- The majority of the CTD cost variance is from legacy work dating back to the American Recovery and Reinvestment Act (ARRA) time period.
- The remaining CTD favorable cost variance base-funded work is due to efficiencies for Surveillance and Maintenance and D4 activities as a result of utilization of existing site equipment and fewer resources, and Program Management utilizing fewer resources.

Variance at Completion (+\$26.8M/+5.5%)

The favorable Variance at Completion is due to under runs in the Waste Identification Form (WIF) Development, Cold and Dark, and Demolish 212N, 212P, and 212R Projects during the ARRA project. Efficiencies were gained by combining these activities into the D4 activities, thus reducing overall resource requirements.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 040/RL-0040 Nuclear Facility D&D	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	38.9	25.8	13.1
Incremental Scope Pending Change Management	0.0	3.2	(3.2)
RL-0040 – Total	38.9	28.9	9.9

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

Fiscal year (FY) 2017 projected funding for project breakdown structure (PBS) RL-0040 is \$38.9 million. The incremental scope pending includes remaining scope for REDOX roof replacement; silo cleanout of levels 1-3; the north sample gallery cleanout; and balance of the demolition of the four B Plant ancillary buildings and REDOX steam lines demobilization.

The EAC increased by the costs incurred for the Tunnel 1 initial recovery.

Critical Path Schedule

Critical path analysis can be provided upon request.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-250b	Submit to Ecology a three-year rolling prioritized schedule to implement waste site removal actions.	3/31/2017	3/30/2017 (A)		Complete
M-085-80A	Submit to Ecology secondary document, a data quality objective (DQO) report to access structural integrity of PUREX storage tunnels 1 and 2.	9/30/2017		8/30/2017	On schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	RL Due Date
RL Review of 202S Demo Prep / D&D / Annex Action Memo	11/21/16 (A)	09/03/17
RL Review of 202S Demo Prep / D&D / Annex SAP	03/09/17 (A)	04/24/17 (A)
RL Review of 221B Demo Prep & Stabilization of Legacy Vent System Action Memo	06/28/17	07/27/17
RL Review of 202A Demo Prep / Annex / Vent Mods Action Memo	10/09/17	11/06/17

Section F

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



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

T. L. Hobbes
Vice President for 618-10 Burial Ground
and Environmental Restoration
Disposal Facility

W. E. Kirby
Vice President for 324
Building Disposition
Project

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

Support of Truthful Cost or Pricing Data (TCoPD) deliverables for change order definitization of River Corridor Closure Contract (RCCC) scope continued in the month of May. The project continued the following progress: 100K Waste Site remediation; 105KW Fuel Storage Basin deactivation and demolition long-range planning; 618-10 Burial Ground and 316-4 Waste Site remediation; 300-296 design for the 324 Building structural modifications and mockup; and equipment procurements, floor saw testing, and airlock entries for debris cleanout.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
17-EMS-KBOPR-OB1-T1	Increase compliance at KBOPR Project.	Develop compliance matrices for 100K CERCLA documents.	9/30/17	100%
17-EMS-KBOPR-OB2-T1	Universal Waste and Recycling Compliance and Spill Prevention.	Monitor and evaluate universal waste.	9/30/17	64%
17-EMS-KBOPR-OB3-T1	Reduce Waste	Reduce plastic water bottle use at project.	9/30/17	99%

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	*1	*Recordable incident 24238 on November 17, 2016, was recorded under PBS RL-0013; however, the incident occurred at ERDF, which is part of PBS RL-0041.
First Aid Cases	2	24	<ul style="list-style-type: none"> 5/15/17 – Employee tripped over a piece of wood that was nailed to the floor of a conex box. Employee did not experience any pain at the time, but later reported foot pain. Employee was taken to medical for evaluation and released without restriction. (24459) 5/17/17 – Employee missed the last step walking down a stairwell, losing his balance and falling on his right side, receiving minor cuts to his right hand and elbow. Employee was taken to HPMC for evaluation and released without restriction. (24461)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0041 Accomplishments

- 100K AB Waste Site Area Remediation:
 - o Resolved EPA comments on Remaining Sites Verification Package for closure of waste sites 100-K-101, 25, 27, 35, 79, and 98; and 120-KE-1, 2, 3, 4, 5, 6, and 9. EPA approval for closure expected by June 15, 2017.
- 100K AF Waste Site Area Remediation:
 - o Provided EPA with Verification Sampling Instruction (VSI) for waste site 100-K-103.
- 100K AH Waste Site Area Remediation:
 - o Completed excavation of waste site 1607-K5 and received in-process sampling results, which were acceptable. Began developing VSI.
- 100K Asbestos Site Cleanup:
 - o Completed removal of asbestos on waste sites 100-K-115, 100-K-116, 100-K-124, 100-K-125, 100-K-126, 100-K-127, and 100-K-131.
- 100K AA Waste Site Area Remediation:
 - o Started excavation of waste site 1607-K1, stopped and placed the site in a safe configuration, as the 618-10 Project and PFP required all available Environmental Restoration Disposal Facility (ERDF) cans and drivers.
- The RL Contracting Officer provided authorization to add back-fill activities to the scope for Change Order #307, *100K Area Waste Site Quantity Increase*. CHPRC will provide RL with an update to change proposal for CO #307, reflecting this added scope.
- K West Basin Deactivation & Demolition (D&D), KE/KW Reactor Interim Safe Storage (ISS), 100K Soil remediation and Ancillary Facility D&D:
 - o Contract Modification No. 581 authorized a \$750,000 NTE with NTP, on March 13, 2017. Contract Modification expected on May 30, 2017, will increase the NTE by \$966,300 for a new total authorization of \$1,716,300.
 - o The final bid for four Sludge Transport & Storage Containers (STSC) received from ABW and under evaluation. Contract award for the four STSCs anticipated in June.
 - o K West Basin D&D, KE/KW Reactor ISS, 100K Soil Remediation, and Ancillary Facility D&D Work Breakdown Structure (WBS) Dictionaries, Basis of Estimates, and schedules are being loaded into to Long Range Plan (LRP) SharePoint and Primavera P6 LRP node. This information will be used for fiscal year (FY) 2018 through FY2022 (five-year planning process).
 - o Completed the Gamma Ray Spectrometer (gamma camera) acceptance test.
- Remaining Closure Operations (RCO):
 - o Resource Conservation and Recovery Act of 1976 (RCRA) Permit Closure.
 - Submitted 1324N/NA Class 1 prime to Ecology for their informal review.
 - Proposed Class 2 modifications to clean-close 1301-N and 1325-N Liquid Waste Disposal Facilities approved by Ecology. Sixty-day public comment period will start June 5, 2017.
 - o Requested 1706-KE Class 1 prime permit modification documents from Ecology to remove 1706-KE from Hanford RCRA permit.
 - o Files for 1706-KE Class 1 prime permit modification are being compiled for RL informal review.

- o MO226 Demolition
 - Began preparation of Facility Site Closure Form and Tri-Party Agreement M-94-00 completion letter.
- o Revegetation
 - Finalized the work package to support shrub seed collection, and completed training and badging for an additional seed collection resource.
 - Started opportunistic collection of shrub seeds at various Hanford locations to support FY2018-FY2019 revegetation activities.
- 618-10 Burial Ground:
 - o 21,246 tons of contaminated soil sent to ERDF from the 618-10 Trench Mass Excavation.
 - o Completed 13 Steel Vertical Pipe Units (VPU) retrieval segments with a total of 60 retrieval segments completed out of 60. Steel VPU retrieval complete as of May 8, 2017.
- 316-4 Waste Site:
 - o Sent 461 cans (9,838 tons) of contaminated soil to ERDF.
 - o Excavated 13,992 tons of overburden soil.
 - o 301,708 tons excavated of forecasted 302,859 total tons (includes overburden and contaminated soils). Total tons to excavate reduced due to project design efficiencies. Excavation expected to be completed in June.
- 600-63 Waste Site:
 - o Power disconnected from light pole near site, lighting fixtures and power cable removed in preparation for excavation activities.
- 324 Building Min Safe:
 - o Revised Main-004 procedure to describe necessary chemical updates.
 - o Updated Stationary Operating Engineer (SOE) Surveillance procedure PWR-002.
 - o Issued 324 Effluent Specification revision (HNF-3444).
 - o Completed five Hanford Fire Department Preventative Maintenance (PMs) package activities (12- and 24-month PMs).
 - o Completed Zone I and Zone II HEPA filter differential pressure testing.
 - o Completed the Annual Stack Flow Measurements.
 - o Performed 11 Preventative Maintenance package activities.
 - o Established Task Instructions to repair/replace Fan 975 Blocking Damper linkage.
- 300-296 Soil Remediation Project:
 - o A 300-296 Project Brief and 324 Building general tour was conducted for the members of the Hanford Advisory Board on May 16, 2017.
 - o The 300-296 Waste Site Remediation Integrated Project Team (IPT) meeting was conducted on May 9, 2017. Topics included: Water Usage Management Study Results, Transition to Operations Strategy, Structure Downgrade Assumption, and a discussion of the content that must be authorized in the next change order to conduct 324 Building prerequisite activities in accordance with the project schedule.
 - o The final hazard categorization and accident analysis is currently in peer review and anticipated to be completed in early June.
 - o The contract award for the Prototype Waste Box was issued on May 3, 2017.
 - o Contractor Kickoff Meetings were conducted for the Camera and Lighting System and the Remote Excavation Arm System on May 3, 2017.

- o The contract for the Transfer Mechanism System was awarded on May 8, 2017, and the Kickoff Meeting was completed on May 10, 2017.
- o The project team performed risk mitigation activities related to the Transfer Mechanism plugs and passages. These activities were successful in proving consistent with the current design for the Transfer Mechanism.
- o Preparations to award the contract for mockup modifications required to support soil removal equipment installation were progressed. Contractor bids have been evaluated, and the award is anticipated during the week of May 25, 2017.
- o Documents supporting the Request for Proposal (RFP) for the conduct of facility prerequisites (starting with Interference Removal) are nearing completion, and the RFP is expected to be issued mid-June.
- o Floor Saw Testing was successfully and safely completed on April 28, 2017, and test report preparations were initiated. A lessons learned/question-and-answer session was completed on May 8, 2017, to assist in identifying design or test attributes to be included in the test report.
- o A kick-off meeting was conducted for the Remotely Operated Impact Device (ROID) and Seal Breaker tools that will be used for the removal of the floor plug between the 324 Building C and D cells.
- o Issued a change to A-05 procedure to describe use of pressure washing in the REC Airlock.
- o A second airlock entry to conduct additional radiological surveys in the 324 Building was completed on April 24, 2017. This survey indicated additional remote sorting, staging, and wash-down were necessary prior to downsizing material and extraction entries could be executed.
- o Two interim storage boxes were moved into the airlock, and targeted material was removed from the cell floor in areas of highest dose and placed into the interim storage boxes. It is anticipated to move this material out of the airlock by mid-June.
- o The trailers that will support 324 Building prerequisite activities (starting with Interference Removal) have been installed, and are now in use by project team members that will oversee facility modifications.
- o Project Technical Services (PTS) Support
 - All project trailers have been successfully installed for the 324/325 and mockup areas.
 - HLAN Services in the 300 Area and Mockup have been completed.
 - The security fence and electrical switchgear have been installed at the mockup. The construction lighting inside the mockup is being installed and electrical utilities are planned to be connected on May 24, 2017.
- Environmental Restoration Disposal Facility:
 - o Receipt of 143,630 tons by CHPRC fiscal year to date (FYTD).
 - o Transported 16 special packaging authorization (SPA) shipments.

MAJOR ISSUES

No major issues to report on at this time.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

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

Risk Title	Unmitigated Risk Impacts	Assessment		Comments											
		Month	Trend												
RL-0041/WBS-041															
Explanation of major changes to the project monthly spotlight chart: No major changes to the monthly spotlight chart in the month of <i>May</i> .															
Realized Risks (Risks that are currently impacting project cost/schedule)															
RCC-316-4-09: 316-4 Discovery of Unexpected Waste/Contamination	Discovery of unexpected waste/contamination, waste/contamination quantities above what is assumed, waste/contamination that is above and beyond COCs and/or waste profile, and/or waste/contamination is found in the assumed clean area of the design. Resulting in greater than planned RAD controls resulting in cost and schedule impacts. Risk Handling Strategy: Accept Probability: Very Low (<10%) Worst Case Impacts: \$240K, 48 day	●	↔	Risk Event: On Tuesday, November 29, 2016, CHPRC discovered debris (wood, metal, etc.) in the 316-4 overburden removal, and then on Wednesday, November 30, 2016, radiological contaminated soil and contaminated debris (plastic and piping) was encountered that was buried in the top six feet of overburden at the 316-4 waste site. On Wednesday, January 4, 2017, and Tuesday, January 24, 2017, additional contamination was discovered. Contamination was discovered approximately four feet above the anticipated location on March 27, 2017. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 70%;">Risk recovery action(s)</th> <th style="width: 10%;">Risk Date</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Send backfill stockpile to ERDF.</td> <td rowspan="2" style="text-align: center;">11/29/16</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Update TCoPD to align with found conditions.</td> <td style="text-align: center;">5/26/17</td> <td style="text-align: center;">99</td> </tr> </tbody> </table> Recovery Action Assessment: No changes in the month of <i>May</i> . CHPRC has realized cost and schedule impacts, resulting from this change in conditions. Efforts continue to quantify schedule and cost impacts. CHPRC has and continues to perform all actions that may mitigate impacts; however, CHPRC plans to capture any scope and cost changes resulting from the contamination discoveries prior to March 2017 in the TCoPD for the corresponding change proposal (CP 041 304 1600).	Risk recovery action(s)	Risk Date	FC Date	%	Send backfill stockpile to ERDF.	11/29/16	Complete	100	Update TCoPD to align with found conditions.	5/26/17	99
Risk recovery action(s)	Risk Date	FC Date	%												
Send backfill stockpile to ERDF.	11/29/16	Complete	100												
Update TCoPD to align with found conditions.		5/26/17	99												
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)															
RCC-300-296-03: Mockup testing and qualification of remote equipment / process identifies major modification requirements.	Issues such as equipment interferences, equipment reliability, etc. arise during mockup or component testing, resulting in negative cost or schedule impacts during future production work. There is the potential for more frequent equipment repairs/full equipment change-outs than planned, which could result in cost and schedule impacts. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$86K, 80 days	●	↔	Risk Trigger Metric: Risk could be triggered through the conduct of component testing or testing/training performed at the mockup that produced inadequate or unexpected test results. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 75%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Conduct Concrete Floor Saw Test (cut rate, embedment cutting), and determine P.O.P.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Perform Construction Acceptance Test at Mockup Facility – this includes REA System with HPUs, Cameras, and Lighting and Transfer Mechanisms.</td> <td style="text-align: center;">11/30/17</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> Mitigation Assessment: The Mockup will be used to validate equipment performance and to support training personnel for installation, removal, and operation of soil remediation equipment in the 324 Building. Remotely operated equipment (e.g. floor saw and REAs) could experience higher failure rates and/or performance issues from lack of thorough demonstration testing. <i>Vendor selections for the three main soil removal systems were completed; kickoff meetings conducted, and design finalization activities were in progress as of the end of FM May.</i> Vendor delivery schedules have been placed into the project schedule and weekly performance reviews are in progress. Floor saw testing was successfully completed as of the end of April and the test report was issued for review and comment as of the end of FM May. The performance specification and Functional Requirements Document for the floor saw system are being updated to reflect the test results prior to the RFP being issued for the floor saw system for the mockup. Finally, the contract for modifications at the	Mitigation action(s)	FC Date	%	Conduct Concrete Floor Saw Test (cut rate, embedment cutting), and determine P.O.P.	Complete	100	Perform Construction Acceptance Test at Mockup Facility – this includes REA System with HPUs, Cameras, and Lighting and Transfer Mechanisms.	11/30/17	0		
Mitigation action(s)	FC Date	%													
Conduct Concrete Floor Saw Test (cut rate, embedment cutting), and determine P.O.P.	Complete	100													
Perform Construction Acceptance Test at Mockup Facility – this includes REA System with HPUs, Cameras, and Lighting and Transfer Mechanisms.	11/30/17	0													

<p>RCC-300-296-11: Current REC cell seismic analysis is inadequate</p>	<p>Regulatory agencies require different seismic analysis criteria than the UBC 1961 methodology that was originally used, resulting in additional design and more significant structural alterations to the 324 Building, which would negatively impact project cost and schedule</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$288K, 48 days</p>			<p>mockup to support equipment installations was awarded in, May and a kickoff meeting is planned for early June.</p> <p>Risk Trigger Metric: This risk would be triggered at the same time it is realized, with regulatory agencies requiring different seismic analysis criteria than what was used in the original estimates.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Engage Defense Nuclear Facility Safety Board (DNFSB) early concerning seismic design criteria.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: The original design of the 324 Building was based on the 1961 Uniform Building Code (UBC). Facility structural modifications have been analyzed using the UBC 1961 methodology (Section 7.8, KUR-1782F-CALC-C001, 324 Building REC Structural Stability Evaluation); as the most appropriate and cost effective approach given the overall intent to remediate the building following soil removal. A recurring update process, on a bi-monthly basis, was proposed and accepted by the DNFSB representatives. The first update occurred on February 23, 2017, and introduced the DNFSB field and technical representative to the intended approach of utilizing jet grouting to provide structural support during excavation. No immediate concerns were identified by members of the board; however, it is expected that engagement will be more aggressive as design continues maturing. An update on the progress of the design was provided at the bi-monthly update in late April. The next bi-monthly update to the DNFSB is planned for late June. Finally, the Functional Requirements Document and Performance Specification for structural modifications to the 324 Building design (including jet grouting) have been issued in draft and will be incorporated into the request for proposal solicitation for a contract to complete design and make facility modifications in preparation for soil removal equipment installations and soil removal planned for release in mid-June.</p>	Mitigation action(s)	FC Date	%	Engage Defense Nuclear Facility Safety Board (DNFSB) early concerning seismic design criteria.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Engage Defense Nuclear Facility Safety Board (DNFSB) early concerning seismic design criteria.	Ongoing	N/A								
<p>High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</p>										
<p>Lifecycle Risk Triggers (Risk could be realized at any point of the project)</p>										
<p>RCC-618-10-07: Contamination Event at 618-10 Waste Site</p>	<p>During fieldwork activities, a contamination event occurs that requires corrective actions, resulting in schedule and cost impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$1,288K, 64 days</p>			<p>Risk Trigger Metric: The risk could be triggered by high winds or operational upsets (i.e. spills or airborne release).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Enhanced radiological controls implemented on project.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of May. Much of the 618-10 work is performed in hazardous and radioactive environments. By its nature, the work can be dangerous. Although CHPRC procedures, safety programs, and training programs are designed to minimize the potential loss of control of hazardous/radioactive substances, such an occurrence could be deemed to be significant enough to warrant corrective actions outside the baseline (i.e. a prolonged work shutdown).</p>	Mitigation action(s)	FC Date	%	Enhanced radiological controls implemented on project.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Enhanced radiological controls implemented on project.	Ongoing	N/A								
<p>RCC-618-10-09: Discovery of Unexpected Waste/Contamination</p>	<p>Discovery of unexpected waste/contamination, waste/contamination quantities above what is assumed, waste/contamination that is above and beyond COCs or waste profile, or waste/contamination is found in the assumed clean area of the design. Resulting in greater than planned RAD controls resulting in cost and schedule impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Low (<10%) Worst Case Impacts: \$1,280K, 64 days</p>			<p>Risk Trigger Metric: This risk has previously been realized as more drums than planned were discovered. This risk has the potential to occur again during mass excavation if additional waste/contamination is discovered.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Closely managing waste inventories and discoveries, and making adjustments as required.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of May. The estimate for the remediation of the 618-10 Waste Site included an assumed amount of additional drums still to be remediated. The project identified unexpected additional drums that were not planned or estimated. The project will continue to closely monitor and manage waste inventories and any new discoveries.</p>	Mitigation action(s)	FC Date	%	Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A								
<p>Unassigned Risks (Pending ownership of identified risks/opportunities)</p>										
<p>No unassigned risks identified in the month of May.</p>										

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	11.5	12.2	8.4	0.6	5.3%	3.7	30.6%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$0.6M/+5.3%)

The current month favorable schedule variance is partially due to the completion of previously behind schedule scope: the 300-296 manipulators were planned for arrival/payment in April, but were not green-tagged/invoiced until April 24, 2017, (fiscal month May). In addition, significant progress of soil excavation at the 316-4 Waste Site contributed to the current month schedule variance (\$0.3 million). This was partially offset due to 100K Closure soil remediation activities. The variance was caused by site closures and weather delays from snow, ice, and frozen ground in the winter months: The start of remediation activities in Waste Site Areas AA and AH was delayed and the progression of remediation at waste site 100-K-103 in Area AF was slowed. Additionally, the mobilization of the new contractor, unrelated to weather, did not occur as planned due to delays associated with training and medical processing of the new personnel. The culmination of these issues have shifted the entire soil remediation schedule, causing current month schedule variances each reporting period. Waste site remediation is expected to be delayed until FY2018, and backfill activities for Area AB Head House and the 183.2KE Sedimentation Basin will be performed for the remainder of FY2017. In addition, delays in processing 618-10 Burial Ground drums to an offsite waste processing subcontractor.

CM Cost Performance (+\$3.7M/+30.6%)

The current month favorable cost variance is partially due to the 618-10 Burial Ground project management and support accounts that experienced significant underruns due to efficient use of resource sharing across the complex and reduced material usage (\$1.1 million). Additionally, excavation efficiencies at the 316-4 Waste Site reduced the total volume of soil to be removed, which resulted in significant progress with minimal costs (\$1.3 million).

Contract-to-Date (\$M)

WBS 041/ RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	433.2	437.6	389.0	4.5	1.0%	48.7	11.1%	554.7	495.8	58.9

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$4.5M/+1.0%)

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$48.7M/+11.1%)

The favorable cost variance is primarily due to completing Confirmatory Sampling No Action (CSNA) waste sites early and under cost. In addition, less demolition was required for the KE Sedimentation Basin, and there were underruns in G&A and Direct Distributable costs. This was partially offset by the cost overruns in prior years for the Utilities Project. The 618-10 Complex has also experienced favorable cost variances due to shared resources, significant progress at the 316-4 Waste Site, and lower drum processing costs than anticipated (\$10.0 million).

Variance at Completion (+\$58.9M/+10.6%)

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

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	146.3	108.7	37.6
Incremental Scope Pending Change Management	0	15.5	(15.5)
RL-0041 - Total	146.3	124.2	22.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis:

FY2017 projected funding for PBS RL-0041 is \$146.3 million. The increase in the variance at completion (VAC) of \$200K is insignificant.

Critical Path Schedule:

Critical Path Analysis can be provided upon request.

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. RL Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The Performance Measurement Baseline (PMB) annual update, implemented in September 2013, and subsequently approved baseline change requests (BCR) define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is a one-year look ahead of commitments and Tri-Party Agreement enforceable milestones and non-enforceable target due dates.

Number	Title	Due Date	Actual Date	Status/ Comment
M-016-00A	Complete all response actions for 100 Areas Except GW in M-016-00 and 100 K addressed in M-016-00C	3/31/2017	3/8/2017 (A)	Completed ahead of Schedule
M-016-164	Complete 100-N Interim Response Actions & Close 100-N Ancillary Facilities Area of Contamination	3/31/2017	3/8/2017 (A)	Completed ahead of Schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	RL Due Date
RL and Regulator Review of Closeout Sampling Instructions for 600-63 Waste Site	4/27/17 (A)	5/1/17 (A)
RL and Regulator Review of Closeout Sampling Instructions for 316-4 Waste Site	5/18/17 (A)	7/5/17
RL and Regulator Review of Closeout Sampling Instructions for 618-10 Burial Ground	7/19/17	9/1/17
RL/EPA Review & Approve Backfill Concurrence for 316-4 Waste Site	9/21/17	9/28/17
RL and Regulator Review of CVP and Waste Site Reclassification Form for 316-4 Waste Site	10/17/17	11/30/17
RL/EPA Review & Approve Backfill Concurrence for 600-63 Waste Site	11/16/17	11/29/17
RL and Regulator Review of CVP and Waste Site Reclassification Form for 600-63 Waste Site	11/16/17	12/30/17
RL/EPA Review & Approve Backfill Concurrence for 618-10 Burial Ground	1/23/18	1/30/18
RL and Regulator Review of CVP and Waste Site Reclassification Form for 618-10 Burial Ground	3/14/18	4/27/18

Section G

Fast Flux Test Facility Closure (RL-0042)



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

May 2017
CHPRC-2017-05, 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

	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

- Held initial discussions to identify fiscal year (FY)2018 scope of work.
- Started routing Hanford Atomic Metal Trades Council (HAMTC) work package for approval to remove the access hatch and the old P-16 pump and motor in preparation for the new P-16 pump install.
- Continued development of the construction work packages for installing the new P-16 submersible pump and continued contractor training.
- Performed lock-out tag-out (LOTO) activities to support upcoming P-16 pump removal and new installation.
- Completed the 400A 3 MO Chemical Inventory report.
- Completed the 482A/ 1YR Water Tank Temp/Level Alarm Fire LOTO review.
- Received and started reviewing proposals for the installation of the new 400 Area change trailer.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

No key risks currently identified.

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	0.2	0.2	0.2	(0.0)	-3.5%	0.0	7.0%

Numbers are rounded to the nearest \$0.1M

CM Schedule Performance: (-\$0.0M/-3.5%)

The schedule variance is within reporting thresholds.

CM Cost Performance: (\$0.0M/+7.0%)

The cost variance is within reporting thresholds.

Contract-to-Date

(\$M)

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Total	23.5	23.5	19.3	(0.0)	-0.2%	4.2	17.9%	26.5	23.9	2.6

Numbers are rounded to the nearest \$0.1 million

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

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$4.2M/+17.9%)

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

Variance at Completion (+\$2.6M/+9.8%)

The Variance at Completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS VS. SPEND FORECAST (\$M)

RL-0042 FFTF Closure	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	3.9	1.9	2.0
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0042 – Total	3.9	1.9	2.0

Numbers are rounded to the nearest \$0.1 million

Funds Analysis

FY2017 projected funding for project breakdown structure (PBS) RL-0042 is \$3.9 million. The spending forecast of \$1.9 million is in line with the FY2017 BAC of \$2.1 million.

Critical Path Schedule

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

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



May 2017
CHPRC-2017-05, 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**

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) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2017 / 05 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO X YES (YYYYMMDD) 2009 / 09 / 18				

5. CONTRACT DATA								
a. QUANTITY 1	b. NEGOTIATED COST 5,582,760	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 179,354	d. TARGET PROFIT/FEE 241,315	e. TARGET PRICE 5,824,075	f. ESTIMATED PRICE 5,865,490	g. CONTRACT CEILING 5,824,075	h. ESTIMATED CONTRACT CEILING 5,865,490	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) Dickerson, Kala K		b. TITLE Prime Contract Compliance Manager	
a. BEST CASE 5,561,454						c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)	
b. WORST CASE 5,651,734									
c. MOST LIKELY 5,624,174		5,762,114		137,940					

8. PERFORMANCE DATA																		
Control Account.PBS	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION			
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)								
ITEM (1)																		
RL-0011 Nuclear Mat Stab & Disp PFP	173	2,327	10,243	2,154	-7,916	980,104	939,192	1,024,914	-40,913	-85,723	0	0	0	980,454	1,069,369	-88,915		
RL-0012 SNF Stabilization & Disp	6,543	5,957	4,575	-586	1,382	674,089	674,357	644,117	268	30,240	0	0	0	740,417	706,198	34,219		
RL-0013 Solid Waste Stab & Disp	7,341	7,287	6,905	-54	382	1,156,526	1,154,641	1,079,745	-1,885	74,896	0	0	0	1,345,219	1,297,280	47,939		
RL-0030 Soil & Water Rem-Grndwtr/Vadose	14,138	9,652	8,400	-4,486	1,252	1,378,932	1,348,107	1,313,053	-30,825	35,054	0	0	0	1,566,411	1,510,062	56,349		
RL-0040 Nuc Fac D&D - Remainder Hanfrd	2,249	2,058	2,992	-190	-934	440,569	435,122	406,089	-5,447	29,032	0	0	0	480,771	453,969	26,802		
RL-0041 Nuc Fac D&D - RC Closure Proj	11,550	12,163	8,440	613	3,723	433,154	437,626	388,957	4,472	48,669	0	0	0	553,062	494,152	58,911		
RL-0042 Nuc Fac D&D - FTF Proj	173	167	155	-6	12	23,511	23,465	19,275	-46	4,190	0	0	0	26,455	23,864	2,591		
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														6,561	6,561	0		
e. SUBTOTAL	42,167	39,611	41,710	-2,556	-2,099	5,086,884	5,012,510	4,876,151	-74,374	136,358	0	0	0	5,699,350	5,561,454	137,896		
f. MANAGEMENT RESERVE														62,720				
g. TOTAL	42,167	39,611	41,710	-2,556	-2,099	5,086,884	5,012,510	4,876,151	-74,374	136,358	0	0	0	5,762,070				
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																		
a. VARIANCE ADJUSTMENT																		
b. TOTAL CONTRACT VARIANCE																		
										-74,374		136,358		5,762,070		5,561,484		200,586

* In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

*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) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 05 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)							
34 - Env Program & Strategic Plng	808	899	574	92	325	71,352	71,249	66,035	-103	5,214	0	0	0	82,843	79,692	3,151	
35 - Business Services	0	0	255	0	-255	472,524	472,524	448,797	0	23,727	0	0	0	472,524	455,791	16,733	
36 - Prime Contract & Proj Integr	145	145	113	0	32	6,230	6,230	3,563	0	2,668	0	0	0	8,414	5,676	2,739	
3B - PFP Closure Project	173	2,327	9,982	2,154	-7,655	892,845	851,933	945,222	-40,913	-93,290	0	0	0	893,195	982,644	-89,448	
3C - Waste & Fuels Management Project	7,318	7,263	6,880	-54	383	1,048,013	1,046,128	971,388	-1,885	74,741	0	0	0	1,236,373	1,188,562	47,811	
3D - Soil & Groundwater Remediation	13,282	8,704	7,785	-4,578	919	1,207,592	1,176,870	1,140,862	-30,722	36,008	0	0	0	1,382,783	1,323,440	59,342	
3G - K Basin Oper & Plateau Remediation Project	10,597	9,891	8,252	-706	1,639	1,302,029	1,302,891	1,227,226	862	75,665	0	0	0	1,473,594	1,388,600	84,994	
3H - 618-10 and ERDF	6,838	6,928	4,197	90	2,731	57,871	57,833	45,858	-38	11,975	0	0	0	100,012	89,750	10,262	
3J - Building 324 Disposition Project	3,006	3,454	3,671	448	-217	28,427	26,851	27,200	-1,576	-349	0	0	0	43,050	40,738	2,312	
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d. UNDISTRIBUTED BUDGET													6,561	6,561	0	0	
e. SUBTOTAL (Performance Measurement Baseline)	42,167	39,611	41,710	-2,556	-2,099	5,086,884	5,012,510	4,876,151	-74,374	136,358	0	0	0	5,699,350	5,561,454	137,896	
f. MANAGEMENT RESERVE													62,720				
g. TOTAL	42,167	39,611	41,710	-2,556	-2,099	5,086,884	5,012,510	4,876,151	-74,374	136,358	0	0	0	5,762,070			

* In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

CONTRACT PERFORMANCE REPORT															Form Approved OMB No. 0704-0188	
FORMAT 3 - BASELINE															DOLLARS IN THOUSANDS	
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:			3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009			4. REPORT PERIOD a. FROM: 2017/04/24 b. TO: 2017/05/21							
5. CONTRACT DATA																
a. ORIGINAL NEGOTIATED COST 4,312,366			b. NEGOTIATED CONTRACT CHANGE \$1,270,393		c. CURRENT NEGOTIATED COST (A + B) \$5,582,760		d. ESTIMATED COST AUTH UNPRICED WORK \$179,354		e. CONTRACT BUDGET BASE (C + D) \$5,762,114		f. TOTAL ALLOCATED BUDGET \$5,762,070		g. DIFFERENCE (E - F) \$44			
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2018		k. CONT COMPLETION DATE 9/30/2018			l. EST COMPLETION DATE 9/30/2018						
6. PERFORMANCE DATA																
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)						UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)
			+1 Jun-17 (4)	+2 Jul-17 (5)	+3 Aug-17 (6)	+4 Sep-17 (7)	+5 Oct-17 (8)	+6 Nov-17 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)		
a. PM BASELINE (BEGIN OF PERIOD)	5,044,717	41,475	45,782	33,143	32,679	46,516	26,688	39,332	3,391,477	391,653	471,323	504,826	485,033	446,891	4,243	5,695,446
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																
BCR-000-17-003RO																0
BCR-013-17-016RO																0
BCR-030-17-018RO																0
BCR-030-17-019RO																0
BCR-030-17-020RO																0
BCR-040-17-012RO, RL-040 Add TPA Milestone M-085-82 to PMB																0
BCR-041-17-025RO Repricing																0
BCR-041-17-021RO													(68)			(68)
BCRA-041-17-023RO OA BYS													1,655			1,655
BCRA-041C-17-013RO CAP BYS																0
BCRA-PRC-17-025RO, HPIC Updates May 2017																0
BCR-PRC-17-026RO, Undistributed Budget Adjustments May 2017															2,318	2,318
c. PM BASELINE (END OF PERIOD)	5,086,844	42,167	46,422	33,182	32,640	46,770	26,852	39,592	3,391,477	391,653	471,323	504,826	486,619	446,891	6,561	5,699,350
7. MANAGEMENT RESERVE																62,720
8. TOTAL																5,762,070

* CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING**

FORM APPROVED
OMB No. 0704-0188

Dollars in: FTE

The public reporting burden for this collection of information is estimated to average 5.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Service, Paperwork Project (0182-0046), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ORGANIZATION. SUBMIT COMPLETED FORMS IN ACCORDANCE WITH CONTRACTUAL REQUIREMENTS.

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)	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		2017 / 04 / 24	
		c. TYPE CPAF		d. SHARE RATIO		b. TO (YYYYMMDD) 2017 / 05 / 21	
				c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <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 JUN 2017 (4)	+2 JULY 2017 (5)	+3 AUG 2017 (6)	+4 SEPT 2017 (7)	+5 OCT 2017 (8)	+6 NOV 2017 (9)	1st Qtr FY18 (10)	FY18 (11)	FY19-LC (12)	ATCOMPLETE (13)			
300 - Office of the President	6	710	5	7	7	6	6	6	6	6	6	54	0	0	807
303 - Internal Audit	6	453	5	5	5	5	5	5	5	5	5	45	0	0	534
304 - General Counsel	4	426	5	5	5	5	5	5	5	5	5	45	0	0	505
31 - Communications	8	983	9	9	9	8	8	8	8	8	8	74	0	0	1116
32 - Safety Health Security & Quality	53	7021	59	58	58	55	63	66	66	66	66	590	0	0	8037
34 - Env Program & Strategic Plng	43	4646	43	42	42	41	50	51	51	51	51	452	0	0	5418
35 - Business Services	69	7537	71	71	71	68	71	75	75	75	75	666	0	0	8705
36 - Prime Contract & Proj Integr	63	4836	73	73	73	69	56	59	59	59	59	527	0	0	5825
38 - Project Technical Services	34	5486	41	41	41	39	34	36	36	36	36	320	0	0	6073
3B - PFP Closure Project	359	54175	398	280	225	170	35	19	17	17	17	66	0	0	55384
3C - Waste & Fuels Management Project	342	50586	324	313	299	291	320	334	329	329	329	2953	799	0	56548
3D - Soil & Groundwater Remediation	282	36388	279	278	276	257	266	272	276	276	276	2608	1213	0	42112
3G - K Basin Oper & Plateau Remediation Project	359	48231	338	349	345	305	367	354	330	330	330	2697	545	0	53860
3H - 618-10 and ERDF	62	526	156	156	150	141	56	49	49	49	49	339	0	0	1621
3J - Building 324 Disposition Project	136	1082	122	46	41	37	36	41	37	37	37	317	0	0	1760
g. TOTAL DIRECT	1827	223086	1929	1733	1646	1496	1378	1379	1347	1347	1347	11753	2557	0	248305

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) 2017/04/24			
b. LOCATION (Address and ZIP Code) Richland, WA 99354		b. NUMBER DE-AC06-08RL14788		b. PHASE Base		b. TO (YYYY/MM/DD) 2017/05/21			
		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:	42,167	39,611	41,710	(2,556)	-6.1%	(2,099)	-5.3%	0.94	0.95
Cumulative:	5,086,884	5,012,510	4,876,151	(74,374)	-1.5%	136,359	2.7%	0.99	1.03
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	5,699,350	5,561,454	137,896	2.4%	1.00				
Explanation of Variance/Description of Problem:									
<p>Current Period Schedule Variance: The current month negative schedule variance is primarily due to project breakdown structure (PBS) RL-0030 delay of the 100-NR-2 Barrier maintenance and expansion activities, which were scheduled to start in FY2016 but were deferred due to funding limitations and pending resolution of cultural clearance items. Some cultural clearance and other planning activities are forecast to complete in FY2017, with fieldwork initiating in FY2018. Additionally, positive performance earned in prior periods (work acceleration) for 200-PO-1 NRDWL and 100 HR-3 optimization, and 200-UP-1 SE chrome plume characterization drilling campaigns, 100-HR-3 D&D, and 100-HR-3 well realignments, is returning to zero by the end of FY2017.</p> <p>This is partially offset by PBS RL-0011s completion of historical BCWS associated with the 26-inch process vacuum removal, characterization, asbestos, drain lines, E3/E4 duct scope, trench grouting, and drain line remediation in 234-5Z, as well as sample and process vacuum system removal in 291-Z. Because all work is historical, the current schedule variance will be favorable going forward. Additionally, performance of behind schedule demolition work scope associated with the demolition of 236-Z and 242-Z also contributes to this positive variance.</p> <p>Current Period Cost Variance: The current month negative cost variance is primarily due to PBS RL-0011 delay in completion of the PFP Project to achieve slab on grade. The delay is causing needed extensions of both Minimum Safe, Maintenance, and D&D project management resources, without BCWS, to support the remaining D&D work scope until the facility becomes ready for demolition. In addition, asbestos abatement, E4 duct removal, and process vacuum removal are all requiring more time and additional resources to complete work. Additional resources (i.e., pipefitters, electricians, insulators, Radiological Control Technicians) have also been hired temporarily to attempt to recover schedule. Additional activities have been identified that require removal of approximately an additional 10,000 feet of asbestos that was not visible on any plant drawings when the baseline was developed, further delaying the demolition ready activities. Due to delays in ready-for-demo activities, resources supporting waste processing activities that were planned to be completed in FY2016 are continuing to charge for support of waste loadout, processing, and shipping. Additional unplanned shipping materials (waste shipping containers (TL-1800s, SLB2s, IP-1 bags, etc.)) were also required to support waste load-out activities. Unplanned shipments of drums to Perma-Fix Northwest also contributed to the unfavorable variance. Continuation of quarterly stipend certification payments is also contributing to this variance. In addition, due to the historical (December 2015) radiological issues resulting in compensatory measures that have been implemented at PFP, additional radiological and industrial hygiene resources have been assigned to support the PFP Project until the slab-on-grade milestone is met.</p> <p>This is partially offset by PBS RL-0041 project management and support accounts for 618-10 Burial Ground experienced significant underruns due to efficient use of resource sharing across the complex and reduced material usage. Additionally, excavation efficiencies at the 316-4 Waste Site reduced the total volume of soil to be removed which resulted in significant progress with minimal costs.</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: In the month of May several site closures were a direct result of the PUREX Tunnel collapse. In addition, delays to PBS RL-0011 to achieve slab-on-grade is impacting the ability to direct labor resources to other high priority work scope associated with the PRC.</p> <p>Current Period Cost: Delays in achieving slab-on-grade for PBS RL-0011 is requiring both Minimum Safe, and D&D Project Management resources to remain on project without BCWS.</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: Implement tropical working shifts for PBS RL-0011 to mitigate future wind/heat impacts. Additionally, continue to develop impacts associated with the PUREX Tunnel collapse

Current Period Cost: Implement tropical working shifts for PBS RL-0011 to mitigate future wind/heat impacts. Additionally, continue to develop impacts associated with the PUREX Tunnel collapse

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 scope within budget and is currently projecting a Variance at Completion of \$137.9 million, with \$62.7 million of Management Reserve (MR), for a total positive variance of \$200.6 million. For May, the project was 6.1 percent behind schedule and 5.3 percent over planned cost. Contract to Date (CTD), the project was 1.5 percent behind schedule and 2.7 percent under planned cost.

There were 3 of the 12 BCRs in the period that impacted the PMB; BCR-041-17-021R0 – *Incorporate CO #305 Increase the NTE Cost Authority, Remaining NTE Value*, BCR-041-17-025R0 – *300-296 Waste Site Project Update to FY2017 Forward Pricing Rates*, and BCR-PRC-17-026R0 – *Undistributed Budget Adjustments May 2017*.

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 + \$137.9 million, +2.4% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPS - In Process		
	Total Authorized Unpriced Work	\$179,354
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	Grand Total Adjustments	\$179,354

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

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
BCR-PRC-17-026R0	<i>Undistributed Budget Adjustments May 2017</i>	RL-0013, RL-0030, RL-0040, RL-0041	2017 – 2018	\$2,318K

The Undistributed Budget increased by \$2,318K.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
N/A	N/A	N/A	2017 – 2018	N/A

Overall, there was no change in Management Reserve (MR) during May.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2017 – 2018	N/A

Overall, there was no change to the Fee during May.

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 ECWR or BCWR if greater plus the to-go (available) management reserve, which assumes all efficiencies gained contract-to-date will be eroded at completion and all available management reserve is used (e.g., all identified risks realized), plus the scope identified in the Trend Log that is not in the EAC. The Best/Worst and Most Likely EAC values are documented in the Format 1 Report.

Prepared by: Project Control Staff	Date: 8/19/2017	Approved by:	Date:
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** In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.*

Appendix B

Project Services and Support (WBS 000)



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

M. A. Wright
Vice President for
Project Technical
Services

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

S. E. Johnson
Director of
Communications

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

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

PROGRAM SUMMARY

Project Services and Support functional activities continue to provide support and technical services to all CH2M HILL Plateau Remediation Company (CHPRC) projects as well as central management of cross-cutting services.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
17-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 83 percent by compressing occupancy and vacating underutilized facilities. Vacated/unoccupied facilities declared unusable and designated inactive; placed in Care Taker system.	9/30/17	20%
17-EMS-ADMIN-OB2-T1	Maximize the acquisition and use of environmentally preferable products in the conduct of operations.	Establish/utilize green catalogs to maximum extent for products beyond office supply purchases on the website.	10/9/17	32%
17-EMS-PTS-OB1-T1	Universal Waste, Recycling Compliance, Spill Prevention, and Satellite Accumulation Area Inspections.	Monitor and evaluate universal waste, other recycling, and satellite accumulation areas for compliance with CHPRC procedures and WAC 173-303 regulations.	9/30/17	64%
17-EMS-PTS-OB2-T1	Monthly chemical management inspection.	Ensure chemical products are accurately tracked, maintained, and excessed/disposed. Perform quarterly assessment on chemical inventory locations.	9/30/17	64%

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	1	9	<ul style="list-style-type: none"> 5/24/17 - Worker got debris in eye during a high-wind event. (24469)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- There was one First Aid case during the month of May in the functional groups.
 - o Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
 - Continued ongoing implementation activities, which include gap training, associated with DOE-0346, *Hanford Site Fall Protection Program*, Revision 2, which incorporated recent Occupational Safety and Health Administration (OSHA) regulatory changes to 1910 Subpart D, “Walking/Working Surfaces.”
 - Completed assessment of the data quality within the industrial hygiene database.
 - Developed and issued special safety bulletins regarding respirator cartridge issues and radiological boundary expectations.
 - Provided direct support for the Plutonium Finishing Plant (PFP) Management Assessment regarding the demolition of 234-5Z & 291-Z buildings.
 - Provided technical and resource support for the PUREX Tunnel collapse response actions.
 - o Radiological Control accomplishments:
 - Continued to provide radiological work planning support to the Waste and Fuels Project and Central Plateau Surveillance and Maintenance Project.
 - Provided support to the PUREX Tunnel recovery plan.
 - Completed reviews and approved technical evaluations (TEs) for:
 - Waste Encapsulation and Storage Facility Radiological Characterization.
 - Soil and Groundwater Remediation Project Environmentally Controlled Material Program.
 - Central Plateau Surveillance and Maintenance Radiological Control of Miscellaneous Facilities.
 - Provided support to the Environmental Restoration Disposal Facility (ERDF) and 300 Projects for Radiological Control First Line Manager oral board qualifications.

- o Nuclear Operations Support & Compliance accomplishments:
 - Correspondence transmitted to Department of Energy Richland Operations Office (RL):
 - Letter, CHPRC-1700791.1, dated May 1, 2017, *Request for RL Concurrence to use Certification of Conformance Service Temperatures for Analysis Specified in Section B.3.3 of DOE/RL-2001-36, Hanford Sitewide Transportation Safety Document.*
 - Letter, CHPRC-1701764, dated May 2, 2017, *Annual Update for the Documented Safety Analysis for Remediation of the 618-10 Burial Ground and the 316-4 Waste Site, Formerly WCH-459, Revision 4; the Unreviewed Safety Question Determination Summary; and the Fire Hazard Analysis for Remediation of the 618-10 Burial Ground and the 316-4 Waste Site, Formerly WCH-540, Revision 8.*
 - Letter, CHPRC-1701516, dated May 3, 2017, *Transmittal of the Evaluation of Safety of the Situation and the Unreviewed Safety Question Determinations for the Solid Waste Operations Complex Seismic Event with Fire Analysis.*
 - Letter, CHPRC-1701857, dated May 4, 2017, *Documentation of Annual Review of the Package-Specific Safety Document for Steel Drums, CHPRC-01039, Revision 3.*
 - Letter, CHPRC-1700081A R4, dated May 9, 2017, *Corrective Action Plan to Improve CHPRC Nuclear Safety Documented Safety Analyses and Technical Safety Requirements.*
 - Letter, CHPRC-1701350A R1 re-issue, dated May 18, 2017, *Transmittal the 2016 Annual Update to the Solid Waste Operations Complex Master Documented Safety Analysis, HNF 14741, Revision 12; the Technical Safety Requirements for the Solid Waste Operations Complex, HNF-15280, Revision 12; the Unreviewed Safety Question Determinations Summary; and the Solid Waste Operations Complex Fire Hazards Analysis, HNF-21239, Revision 7.*
 - Letter, CHPRC-1702224, dated May 31, 2017, *Transmittal of the 105-KW Basin Final Safety Analysis Report, HNF-SD-WM-SAR-062, Revision 23, and the 105-KW Basin Technical Safety Requirements, HNF-SD-SNF-TSR-001, Revision 19, for Approval.*
 - Correspondence received from RL:
 - Letter, 17-NSD-0024_RL, dated May 12, 2017, *U.S. Department of Energy (DOE) Richland Operations Office (RL) Expectations of Safety Basis Document Preparation and use of the CH2M HILL Plateau Remediation Company (CHPRC) Safety Analysis and Risk Assessment Handbook (SARAH).*
 - Letter, 17-NSD-0029_RL, dated May 19, 2017, *The U.S. Department of Energy Richland Operations Office (RL) approval to Use Certification of Conformance (CoC) Service Temperatures for Analysis Specified in Section B.3.3 of DOE/RL-2001/36 “Hanford Sitewide Transportation Safety Document (TSD)”.*
 - Other documents:
 - Completed HNF-17235, *Transportation Safety Document Compliance Matrix, Revision 17.*
 - CHPRC-TS-17-003, *Transportation and Packaging Unreviewed Safety Question Screener and Evaluator List*, was released.
 - Completion of CHPRC-03292, *General Service Open-Head Stainless Steel Drum Procurement Specification.*
 - Completion of CHPRC-03287, *Procurement Specification for 19’x10’x5’ DOT IP-1 Soft Sided Packaging.*
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
 - 288 Condition Reports (CRs) were screened:
 - One significant issue identified.
 - One adverse issues identified.
 - 113 Track until Fixed issues identified.

- 73 Trend Only items identified.
- 92 Opportunity for Improvement (OFI) items identified.
- Eight Screened Out.
- 231 CRs administratively closed.
- 268 CRs actions administratively closed.
- Provided Course #600082, *Responsible Manager Training, Issues Management*, to five employees.
- Providing full time support to PFP Issues Management and Occurrence Reporting activities.
- Transmitted Notification/Final Occurrence Reporting and Processing System (ORPS) report associated with PFP: EM-RL--CPRC-PFP-2017-0011, *Spark Observed While Preparing to Plug in Flow Rate Meter Charging Cable*.
- Transmitted Final ORPS reports associated with PFP: EM-RL--CPRC-PFP-2017-0009, *Criticality System Conduit Cut*; EM-RL--CPRC-PFP-2017-0010, *Potential Inoperability of Criticality Alarm Panel 4, FU-2 Circuit*.
- Provided Cause Evaluation support and transmitted final ORPS report for ERDF: EM-RL--CPRC-ERDF-2017-0002, *Front End Loader and Pickup Truck Collide*.
- Provided support and coordination for the Bi-Monthly Defense Nuclear Facility Safety Board (DNFSB) Site Representative Meeting.
- Sixteen documents were provided in response to DNFSB requests for information.
- Provided support and coordination for the 300-296 Soil Removal Project Presentation to the DNFSB.
- Provided support for the PUREX material at risk and safety basis review.
- Five external Lessons Learned were submitted to OPEXShare May 2017:
 - 2017-RL-HNF-0010, Situational Awareness and Communication Are Key to Preventing Personnel Injury and Equipment Damage.
 - 2017-RL-HNF-0012, Uncontrolled Design Results in Heat Detectors Installed in Unapproved Location.
 - 2017-RL-HNF-0013, Driving an Off-road Shortcut Leads to Personnel Injuries.
 - 2017-RL-HNF-0014, Change to Respirator Filter and Assembly Process Reduces Respiratory Protection Effectiveness to Workers.
 - 2017-RL-HNF-0015, Tingling Felt by Worker Due to Less Than Adequate Grounding.
- Four internal Lessons Learned were submitted to OPEXShare in May 2017:
 - LL-2017-PFP-0004, Legacy Wiring Practice Leads to Potential Electrical Hazard.
 - 2017-WFMP-0001, Non-Conservative Controls During Grouting Activities Results in Spread of Contamination.
 - 2017-S&GRP-0001, Operational Discretion Results in Loss of Configuration Control.
 - 2017-S&GRP-0002, Unfamiliar Work Steps Performed Incorrectly.
- An internal Just-In-Time Report was submitted to OPEXShare May 2017:
 - LL-2017-PFP-0005, Mechanical Issue on ATV Caused Injury.
- Supported a Contractor Assurance benchmarking activity from the West Valley project.
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
 - Completed in-field activities and issued a final report for the PFP Management Assessment to determine the level of readiness of personnel, processes, and systems to satisfy and efficiently demolish 234-5Z and 291-Z facilities. There were five issues and three noteworthy practices identified as a result of the assessment.
 - Initiated planning for the 10 CFR 835 Subpart E, “Monitoring of Individuals and Areas,” surveillance activity scheduled for June through July.

- Initiated the FY2018 assessment planning cycle. CHPRC-1702066, *Fiscal Year 2018 Integrated Assessment Planning*, issued May 16, 2017.
- Completed Software Change Request Integrated Evaluation Plan (IEP) Tool-2811-28/29 that upgrades Required Assessment tracking in the IEP.
- SHSQ-2017-NSPEB-13328, *Nuclear Safety and Performance Evaluation Board (NSPEB) Review of Corrective Actions Taken for SHSQ-2015-NSPEB-13324 (Review of SGRP)*, was completed and the final report was issued on May 22, 2017.
- Supported in Program/Procedure Transition Meeting for the Environmental Restoration Disposal Facility.
- Supported in Soil and Groundwater QL-3 discussion/description; graded approach procedure workshop.
- Prepared and submitted CHPRC-1702061, *Annual Submittal of PRC-MP-QA-599, Quality Assurance Program, Review for Approval*.
- Developing Quality Assurance Engineer qualification card with training organization for improvement implementation.
- Supported the CHPRC Independent Internal Audit of the CH2M HILL Plateau Remediation Company (CHPRC) Office of Civilian Radioactive Waste Management (OCRWM) Program SHS&Q-2017 audit Entrance Briefing and completed fieldwork.
- o Fire Protection accomplishments:
 - Fire Protection Program procedures are being updated to meet current requirements. Plans are also being prepared to complete the change to DOE Order 420.1C, Change 1, upon contract direction.
 - A new Fire Protection Engineering graduate will start work on June 19, 2017.
 - Coordination with the Hanford Fire Marshal's Office has increased significantly and driven by the number of Fire Marshal Permits, Deactivation Analyses, Fire Hazards Analyses (FHA), and other documents to support PFP, Sludge Treatment Plant (STP), Solid Waste Operations Complex (SWOC), and 105KW.
 - A review of the explosives requirements in the Triennial Fire Protection Assessment indicated that changes were needed to existing procedures, and changes are being incorporated in the Fire Protection Procedures.
 - The RL SME for Fire Protection has suggested using a computer model for radiological assessment (Hot Spot) as a replacement for the use of the HIMES Model in fire protection analyses. The suggestion is being evaluated.
 - The following Technical Safety Requirement (TSR) activities were completed:
 - SWOC:
 - o 2X-17-01990 - CWC quarterly combustible surveillance.
 - PFP:
 - o SR 5.18.4.2 – Monthly inspection of facility and exterior for compliance with fire protection combustible controls.
 - o SR 5.19.4.3 – Monthly inspection of facility for energized power cords, energized battery chargers and spontaneous ignition source material.
 - o SAC 5.20.2 – Bi-weekly inspection of front side ventilation zone 1 areas – performed by the facility Fire Safety Officer.
 - Facility Hazards Analysis (FHA):
 - PFP FHA Revision 5 is in the review cycle.
 - The 105KW FHA is published and submitted with the Documented Safety Analysis (DSA)/TSR.
 - SWOC FHA is published and submitted with the Master DSA (MDSA)/TSR.

- B Plant FHA is in comment review, and issues are being worked with Hanford Fire Marshall Office.
 - One facility Fire Protection Assessment was completed in May.
- SHS&Q Focus Areas:
 - **Issue:** Beryllium program assessment findings from Department of Energy (DOE-HQ), Office of Safety, Health and Security Independent Oversight Inspection report.
 - **Status:** Revision 4 continues to be developed by the Hanford Beryllium Committee.
 - **Action:** Beryllium facility assessments and characterization remain on schedule. Beryllium facility assessments have been completed on 1,476 CHPRC facilities.
 - **Issue:** Accident & Injury Reduction.
 - **Status:** Continue investigating recordable, days away, restricted, or transferred, and First Aid injuries to determine cause, prevention, reduction, to prevent recurrence. Project safety campaigns are being effective.
 - **Action:** Injury trends continue to improve across the PRC.
 - **Issue:** PFP support.
 - **Status:** Supporting PFP and other projects with dedicated OS&IH personnel and Radiological Control personnel, from the SHS&Q Central group for Senior Supervisory Watch of high-risk work activities.
 - **Action:** Continuing senior supervisory watch for PFP demolition activities based upon specific hazard activities in coordination with PFP management.
 - **Issue:** Fire Protection program improvements.
 - **Status:** CHPRC Fire Protection personnel are actively interfacing with the Hanford Fire Department (HFD) and RL regarding Fire Protection program improvements related to fire hazard analyses.
 - **Action:** Weekly fire protection program status and initiatives presented each week to the SHS&Q Vice President continue to show improvement.

Environmental Program and Strategic Planning (EP&SP)

- **Environmental Protection**
 - **Compliance Status**
 - CHPRC and RL received an Administrative Order (AO) from Ecology on May 10, 2017 (17-NWP-053; Order Docket 14156) in response to the PUREX Tunnel subsidence event discovered on May 9, 2017. The Order requires three corrective actions to be completed between July 1, 2017, and October 1, 2017. An integrated CHPRC/RL team and routine meetings were established to support the response to corrective actions required by the Ecology AO.
 - A joint WDOH/Ecology letter was received on May 18, 2017, (Air 17-502) with final disposition of general notice of potential violation (GNOPV) issues for emission units at PUREX, B Plant, and the Canister Storage Building. Final disposition for two of the three identified issues was that no violation occurred. No hip priority violations (HPV) were identified. CHPRC and RL have agreed on corrective actions associated with the remaining violation, some enhancements to the sampling frequency at two of the emission units, and submittal of a license revision to close the issues. The GNOPV issues have been under discussion since January 2016.
 - An annual internal assessment of the CHPRC Environmental management System (EMS) was completed with two noteworthy practices, three OFIs, and one minor nonconformance identified. An external assessment of the EMS is scheduled in June 2017.

- **Environmental Compliance & Quality Assurance (EC&QA)**
 - **Assessment Program**
 - Supported the PFP Project through participation in a management assessment of the PFP Readiness for demolition of buildings 234-5Z and 291-Z. The assessment began on April 24, 2017, with EC&QA input provided to the assessment lead on May 3, 2017. The management assessment report was issued on May 22, 2017.

Business Services

- **Supply Chain:**
 - Developed the SOW and the procurement strategy for moving a specially built mobile structure from the 618-10 project area to the 300 Area. The 300-296 Project determined that they could use the structure as part of their efforts to remediate the waste site near 324 Building.
 - Developed a competitive procurement strategy to provide managed-task services for project technical services support.
 - Met with PNNL representatives to review and discuss the project execution plan for demolition activities at PNNL's Research Technology Laboratory (RTL) facility. CHPRC has been chosen to perform deactivation and demolition work at RTL. Discussed work performed to date by PNNL at RTL and the schedule for moving forward with the CHPRC assigned work.
 - Met with a construction contractor to lay out the contracting approach for the recovery of the PUREX Tunnel.
 - Met with representatives for the 100K waste site remediation to discuss plans for continued waste remediation services for FY2018.
 - Worked with the 300-296 Project to develop a proper contracting approach that would permit accurately segregating costs under a construction subcontract.
 - Met with a representative of a waste transportation and packaging manufacturer. This small business makes both DOT 7A, IP-1, and soft-sided waste containers. The addition of another company that has the ability to provide needed waste packages provides schedule flexibility for CHPRC.
 - Worked with DOE's Supply Chain Management Center on a consolidated specification for waste packages that can be used for a complex-wide contract.
 - Met with project representatives to determine the proper procurement approach and make recommendations for the continuation of ERDF operations in FY2018.
- **Facilities & Property Management (F&PM):**
 - The FY2017 Inventory campaign continues – 64.07 percent complete to date. Continued site visits as needed to the Property Coordinators' job sites. Training for one new Property Coordinator is scheduled for June 5, 2017.
 - Move planning/execution for RL and CHPRC between the Federal Building and 2420 Stevens Center Place continues. Expect CHPRC personnel to all be in the Federal Building by late July.
 - Support to new shower trailer for S&GRP Drilling and Sampling Operations at Waste Sampling and Characterization Facility continues.
 - Planning for the new single-wide office trailer in the 400 Area in support of potable water operations continues. Working with Mission Support Alliance (MSA) on placement permits. Cultural Review complete. Trailer electrical service will be installed on-grade in rigid conduit, with no trenching required. Completed geophysics ground scan for trailer set. Facilities Modification Package (FMP) has been completed.
 - A single-wide restroom trailer is being planned as an addition to the 300 Area in support of the 324 Building project. All building permits approved, and civil and electrical engineering permits

- completed. Also completed geophysics ground scan for trailer set. Trailer is still in the procurement process.
- o Completed tie-in of potable water to MO246 and MO061 and restored operational restrooms.
 - **Finance:**
 - o May month-end completed with no cost suspensions.
 - o Placed additional data requested for Construction Work in Progress (CWIP) with applicable backup on share drive for RL to access/disposition.
 - **Human Resources (HR):**
 - o Exited seven employees that had volunteered for the Involuntary Reduction of Force (IROF) as part of the Self-Select Program.
 - o Submitted the Bi-Annual Benefits Metrics Study for CHPRC.
 - o Completed PeopleSoft 9.2 upgrade testing, with implementation to Production to occur June 9 through June 11, 2017.
 - o The Summer Intern Program is in full swing. CHPRC welcomed the first two summer interns to CHPRC on April 24, 2017. An additional eleven interns joined in May. Six more interns are scheduled to join the project during June, and one more in July.
 - **Labor Relations (LR):**
 - o The following is the current status of grievances in the Arbitration Process:
 - PRC-015-051, PRC-016-014 and PRC-027 – purchasing items (i.e. pipe spools) from offsite vendors. Status: Union withdrew all three grievances on April 26, 2017.
 - PRC-015-011 – union claiming mis-assignment of work in regard to respirator maintenance. Status: Arbitration scheduled for October 11, 2016, was postponed by mutual agreement as parties work to reach settlement in the matter. CHPRC is awaiting response from the Union on the company’s settlement proposal.
 - PRC-016-036 – discipline. Status: Parties reached settlement agreement on May 23, 2017, to place grievance in abeyance. If no further discipline administered to subject employee before June 21, 2017, union will withdraw grievance.
 - PRC-016-044, 049, & 050 – termination. Status: Arbitration Panel complete coordinating schedules for arbitration date expected in mid to late February 2018.
 - PRC-016-059 – failure to meet CHPRC pre-employment screening. Status: Arbitration scheduled for November 1, 2017.
 - PRC-017-010 – union claiming employee should have been paid for three days between when he was ready to return to work and when he started with MSA, as CHPRC did not have an open position when he returned. Status: Arbitration Panel selection in process.
 - o Labor Relations continues to support Work Force Restructuring activities for affected bargaining unit employees working with all of the CHPRC projects and the other Hanford contractors to coordinate staffing needs and skills mix issues, and provide opportunities for affected employees.
 - **Procurement:**
 - o Awarded/amended 119 contracts with a total value of \$10.1 million. Additionally, awarded 153 new material purchase orders (PO) valued at \$471,741 to support ongoing project objectives.
 - o At the end of the first 104 months of the CHPRC project, procurement volume has been significant; \$2.53 billion in contract activity has been recorded with approximately 55.01 percent, or \$1.39 billion, in awards to small businesses. This includes 7,777 contract releases, 23,041 POs, and 274,882 PCard transactions.
 - o Contract 62968 was awarded to Oxarc, Inc. on April 26, 2017. This is a fixed unit rate priced contract for “Delivery of High Purity Nitrogen Gas.” This award is valued at \$167,421.60.
 - o Contract 62972 was awarded to James Fisher Technologies, Inc. on April 26, 2017. This is a firm fixed price contract for “300-296 Cameras and Lighting System.” This award is valued at \$1,126,763.90.

- o Contract 63095 was awarded to James Fisher Technologies, Inc. on April 27, 2017. This is a firm fixed price contract for “Remote Excavator Arm (REA) System Design and Build.” This award is valued at \$1,787,040.11.
- o Contract 54177-70 was awarded to Intera Incorporated on April 27, 2017. This is a time and materials contract for “IDF PA Support Document Development.” This award is valued at \$221,998.
- o Contract 44438-54 was awarded to DGR Grant Construction, Inc. on April 28, 2017. This is a firm fixed price contract for “Construction Stage 2 for the 300-FF5 Operable Unit.” This award is valued at \$324,000.
- o Contract 62669 was awarded to WAI Stoller Disposal Operations on May 2, 2017. This is a cost/no fee contract for “Beryllium Subcontractor Medical Removal.” This award is valued at \$254,169.83.
- o Contract 63035 was awarded to Thatcher Chemical Company on May 2, 2017. This is a fixed unit rate contract for “Supply and Delivery of Polyphosphate Chemicals for the 300 Area.” This award is valued at \$811,839.
- o Contract 63132 was awarded to Mid Columbia Engineering Inc. on May 3, 2017. This is a time and materials contract for “Transfer Mechanism System.” This award is valued at \$435,616.43.
- o Contract 54134-9 was awarded to Columbia Energy and Environmental Services, Inc. on May 3, 2017. This is a firm fixed price contract for “Prototype IP-2 Package Design and Fabrication.” This contract is valued at \$177,196.77.
- o Contract 36883-46 was awarded to Ojeda on May 9, 2017. This is a time and materials contract for “Construction Services for Well Alignment Work – Task 1 KR-4 OU.” This award is valued at the not-to-exceed (NTE) amount of \$400,000.
- o Contract 36883-47 was awarded to Ojeda on May 9, 2017. This is a time and materials contract for “Construction Services for Well Alignment Work – Task 2 HR-3 OU.” This award is valued at the NTE amount of \$400,000.
- o Contract 36883-48 was awarded to Ojeda on May 9, 2017. This is a time and materials contract for “Construction Services for Well Alignment Work – Task 3 ZP-1 OU.” This award is valued at the NTE amount of \$200,000.
- o Contract 36883-49 was awarded to Ojeda on May 9, 2017. This is a time and materials contract for “Construction Services for Well Alignment Work – Task 4 UP-1 OU.” This award is valued at the NTE amount of \$520,000.
- o Contract 36883-50 was awarded to Ojeda on May 9, 2017. This is a time and materials contract for “Construction Services for Well Alignment Work – Task 5 WA-1 OU.” This award is valued at the NTE amount of \$200,000.
- o Contract 36883-54 was awarded to Ojeda on May 11, 2017. This is a time and materials contract for “Emergency PUREX Railroad Tunnel Protective Barrier Services.” This award is valued at the NTE amount of \$185,000.
- o Contract 63185 was awarded to Pactec Incorporated on May 11, 2017. This is a firm fixed price contract for “Soft Sided IP-1 Packaging.” This award is valued at \$192,740.00.
- o Contract 62968-2 was awarded to Oxarc, Inc. on May 16, 2017. This is a firm fixed unit price contract for “High Purity Nitrogen Gas for STP.” This award is valued at \$111,614.40.

Prime Contract and Project Integration (PC&PI)

- o A Minor Change to PRC-MP-MS-19361, *CH2M Hill Plateau Remediation Company Project Execution Plan* was approved internally. The changes reflect the CHPRC assumption of the River Corridor Cleanup Contract work scope and the corresponding CHPRC organization structure. A letter was issued on May 2, 2017, to formally transmit the document to RL for approval; the RL response is being tracked on the Open Correspondence Action Log.

- **Prime Contract Compliance (PCC):**
 - In May, PCC received and processed nine contract modifications (593, 595, 599-603, 605, 607) from RL.
 - The Correspondence Review Team received and determined the distribution for 85 incoming letters/documents. The PCC Manager reviewed 36 outgoing correspondence packages.
 - Issued CHPRC-1701993R1, “*Notification of Additional Impacts due to Plutonium Uranium Extraction Plant Storage Tunnel 1 Partial Collapse.*”
 - Issued CHPRC-1700206.2, “*CHPRC Weather Delay Impacts to PM-40-2-17, Complete Reduction-Oxidation Roof Replacement Construction by July 31, 2017.*”
 - Issued CHPRC-1701570A R1, “*Impact Analysis for Contractor Requirements Document Order 420.1C, Change 1 (Supplemented Revision 0), Facility Safety.*”
 - Issued CHPRC-1701803, “*Performance Measure Completion Request for Contracting Officer Acceptance Per PRC Clause B.8(C) – RL-030, Fiscal Year 2017, PM-30-17 Part A.*”
- **Integrated Services**
 - **Estimating & Program Support**
 - No Change Proposals/Request for Equitable Adjustments (CPs/REAs) were submitted to RL in May 2017.
 - Twenty-two CPs/REAs have been submitted in FY2017 to-date, twenty-one on or ahead of schedule with one* CPs/REA submitted late.
 - *Late CP/REA submittal count corrected from prior months which reported two CP/REA submitted late.
 - Began/continued development of CPs/REAs and rough order of magnitude (ROMs):
 - CP 041 328 1656 - 300-296 Waste Site Additional Scope.
 - REA 000 PRC 1643 - Hanford Site Safety - Confined Space Gap Training.
 - ROM 1655 - Impact Assessment and ROM to add Contractor Requirements Document (CRD) 0 420.1C, Change 1, (Supplemented Revision 0), “Facility Safety” and delete CRD 0 420 1C, (Supplemented Revision 0), “Facility Safety.”
 - CP 041 PRC 1657 - Plutonium Uranium Extraction (Plant) Tunnel Recovery/Stabilization.
 - CP 040 PRC 1658 – U-Plant Demolition Deductive Proposal.
 - Supported nine Truthful Cost or Pricing Data (TCoPD) updates for CPs/REAs:
 - CP 041 305 1616 - 300-296 Waste Site Design Change, Initiate Procurements, Initiate Testing, and Initiate Removal of Debris.
 - CP 041 306 1596 - 618-10 Burial Ground, submitted on May 25, 2017.
 - CP 041 306 1597 - River Corridor Closure Contract (RCCC) Remaining Closure Operations.
 - CP 041 306 1600 - 316-4 Waste Site, submitted on May 25, 2017.
 - CP 041 306 1610 - 600-63 Waste Site, submitted on May 25, 2017.
 - CP 040 311 1625 - Emergency Response for Facility/Waste Site Environment, Safety, Health & Quality or Remediation.
 - CP 013 317 1631 - Compliance with Tri-Party Agreement Milestone Change Control Form M-91-15-01.
 - CP 041 319 1640 - Garnet Filter Media Removal.
 - CP 013 322 1639 - Integrated Disposal Facility Revised Operational Requirements.
 - Supported eight RL requests for information (RFIs) for six CPs/REAs:
 - CP 041 307 1621 - 100-K Additional Tons FY2016 and FY2017, submitted response on May 16, 2017.

- CP 040 311 1625 - Emergency Response for Facility/Waste Site Environmental, Safety, Health, and Quality or Remediation, submitted response on May 2, 2017.
- CP 041 319 1640 - Garnet Filter Media Removal, submitted response on May 18, 2017.
- CP 013 325 1626 - CRD 474.2 Change 3, Nuclear Material Control and Accountability, submitted response on May 2, 2017.
- CP 041 326 1651 - 105-KW Fuel Storage Basin, submitted response on May 10, 2017.
- CP 012 327 1646 - Sludge Retrieval Project Acceleration of 105KW and T Plant.
- Miscellaneous estimating support:
 - Continued to support the development of the FY2018 Performance Measurement Baseline (PMB) Update and the out-years Long Range Plan Annual Update deliverables due to RL in July 2017.
 - Completed the preparation of the estimate and schedule for the Pacific Northwest National Laboratory (PNNL) Inter-Entity Work Order 314051 - Mod 3, Project 1, Research Technology Laboratory (RTL) D4 Mobilization, Isolation, and Internal Remediation task. Estimating & Program Support worked with the PFP closure project to develop the requested estimate, including incorporation of the scope changes as reflected in the updated PNNL provided statement of work.
- o **Interface Management:**
 - Interfaces (Technical, Administrative and Regulatory):
 - Initiated effort with Washington River Protection Solutions (WRPS) to align Groundwater Well assignments/ownership in the site Sunflower property system.
 - Continue to support communications between WRPS at 222-S and CHPRC's safety upgrade efforts at REDOX.
 - Supported completion of MSA action to identify Post-Winter Weather (2017) Lessons Learned. Primary improvements discussed included Snow Removal Plan process, Inclement Weather Communications, and Emergency Services Improvements.
 - Coordinating multi-contractor responses and impacts related to the PUREX Tunnel recovery actions.
 - Continued working with MSA Interface Management (IM) and service providers to clarify and document the new request and cost recovery process for the DOE owned regulated vacuum truck (Guzzler). Actions may include updates or reviews of the procedures, service catalog, and/or Service Delivery Document.
 - Annual Forecast of Services:
 - Continued support of the annual FY2018 PMB update; the MSA annual service forecast update is included in this activity.
 - Continued flow of communication/requests for MSA resources, as required by emerging project needs. Recently began working with PFP, ERDF, and the MSA on a modified direct haul scenario utilizing MSA teamsters and PFP and the MSA on implementation of the HAMTC grievance ruling that initiated the need for MSA painters to support operation of the water foggers used to reduce the potential for contamination spread during PFP demolition.
 - Inter-Contractor Issue Resolution:
 - Continued communications between MSA Infrastructure Projects (water/sewer upgrades) and CHPRC Surveillance & Maintenance and Remedy Selection Project point of contacts to communicate concerns related to new infrastructure crossing over, under, and through Waste Information Data System (WIDS) sites slated for near-term remediation. CHPRC Interface Management will continue to facilitate discussions and monitor information exchange.

- Controlling and Service Agreements:
 - Initiated discussions with the Other Hanford Contractors Interface Management leadership regarding possible improvements to the Injury/Event Reporting responsibilities in the Prime Contractors Memorandum of Agreements. The primary area of discussion relates to the criteria of which supervisory capacity is established during these incidents. Discussions were initiated by WRPS after the causal analysis was completed on the Effluent Treatment Facility (ETP) trailer uncoupling event in the bay area of the facility.
 - Published Administrative Interface Agreement (AIA) CHPRC-00236, Revision 3, AIA for Welding and Materials, Engineering Services and Welding Services between CHPRC, MSA, and WRPS.
 - Finalizing AIA with MSA, PNNL and JCI for electrical utilities in the 300 Area.
 - Sent three Service Delivery Documents (SDD) out for review and comment during the month of May.
- J.3 Table Maintenance: No performance level actions occurred within the month of May 2017.
- J.13 and J.14 Tables Maintenance: No performance level actions occurred within the month of May.
- Internal Operations:
 - Continued working several documents revisions/cancellations related to the RCCC scope transfer to CHPRC. Involved parties include the city of Richland, PNNL, and MSA.
 - Continued supporting 300 Area projects mobilization and set up, including infrastructure installation (trailers, utilities, amenities, etc.) and resource alignment.
 - Worked with the CHPRC Central Waste Complex (CWC) engineering to address ownership and maintenance program for “gap” sectionalizing valves between MSA Water Utilities Interface Control Document and the MSA Fire Protection Inspection, Testing and Maintenance organization. Gap investigation to be presented to MSA Subject Matter Experts and Interface Management in early June, 2017.
 - Interfaced with CHPRC Labor Relations to discuss process improvements in acquiring and managing MSA Teamster Loaned Labor. Topics discussed included initial training requirements, return to work approval process, and how to manage/address performance issues.
 - Supported internal discussions with Canister Storage Building (CSB) engineering regarding the future use/ownership of the local “Fire Pump” and any impacts to the Other Hanford Contractors.
- o **Information Management:**
 - Processed 23,008 Electronic Records into the Integrated Document Management System (IDMS).
 - Continued support to internal data validation and tests of DOE Earned Value Cost and Schedule Analysis (EVCSA) tool.
- **Project Integration**
 - o During May, Project Integration facilitated and supported the processing of 12 baseline change requests (BCRs).
 - o The subcontractor supporting the revision of the Project Controls System Description (PCSD) completed the first draft of the revised System Description (SD).
 - o (DOE Project Management Policy and Systems (PM-30) is phasing out the EVCSA and fuse testing tools (version 2.0). The validator will continue to be used and PM-30 is developing 3.0 tools, and expects to have them published in June 2017. EVCSA 3.0 will implement Deltek

Acumen Fuse 8.1 metric library and schedule analysis process. Initially, there will be two EVCSA tools. One will be the Consolidated Nuclear Services (CNS) Pilot Program, which produced and includes a majority of the 3.0 tests. There will be a second tool that completes the automated tests. These tools will be referred to as the CNS EVCSA and the DOE EVCSA tools. CHPRC will be using the DOE EVCSA tool. PM-30 recommends all contractor delve into the PARSIIe flat files, as it is PM-30's intent that this data will ultimately be required for PARSIIe CPP Upload, followed by the retirement of the desktop-based testing tools, as appropriate.

- **Program Integration**

- **000 Project EVM Support:**

- Completed Management Assessment Plan for PC&PI-2017-MA-18735 Maintenance Tracking Assessment to evaluate the effectiveness and reliability of the current CHPRC methodology for identifying, collecting, and reporting operation and maintenance costs for real property assets.
- Prepared BCR-PRC-17-003R0 Add Comprehensive EAC Kick-off Milestone to PMB.
- Gathered data to develop Indirect FY2018 estimate to complete (ETC) and FY2019-FY2022 Long Range Plan (LRP).
- Supported roll-out of MSA services forecast tool:
 - Developed updated resource codes to simplify data input.
 - Conducted three training sessions.
- Drafted Facilities Information Management System Maintenance write-up that details CHPRC's process for accounting for maintenance related to real property.
- Performed review of sample population of 20,000 AH50 hours without an electronic learning management (ELM) training record.

- **Risk Management and Reporting:**

- Issued the CHPRC April Monthly Performance Report to RL.
- Conducted Internal Project Team reviews for April performance data.
- Conducted April performance monthly project reviews.
- Provided PC&PI input into Contractor Assurance System (CAS) April Report.
- Issued CHPRC April Corporate Program Performance report.
- Supported development of the CHPRC April Monthly Highlights to the Nuclear Business Group.
- Conducted risk meetings to support change proposals identified under the Estimating & Program Support section.
- Supported RFI related to the STP accelerated schedule.
- Completed and submitted PNNL RTL phase 1 risk analysis.
- Continued risk reviews for third quarter and LRP efforts.

- **Strategic Management:**

- Updated the FY2018 and multi-year CHPRC Integrated Priority List (IPL) to incorporate near-term and long-term priorities. The IPL includes long-range plan scope and emerging priorities, and incorporates elements of the RL 2020 vision. The FY2018 IPL has been based on partnering sessions between CHPRC and RL.
- Updated CHPRC FY2017 Execution Year Priority list per May field execution schedule (FES) projected completion dates and posted on CHPRC internal website.
- Strategic planning continued in May, including completion of draft 2-5-10 year priorities and project goals. Completed an initial risk assessment of CHPRC led projects to share with RL,

- which will rate all projects on three main criteria: risk reduction, mortgage reduction/return of investment (ROI), and regulatory drivers.
- Continued to load the LRP effort as part of the PMB deliverable for this year. As part of this effort, detailed guidance for this deliverables continues to be updated, which includes detailed scope through FY2020 and a higher-level scope through FY2022. Strategic management is supporting various projects in this effort, and providing resources to ensure successful completion of the LRP. These efforts included Risk Mitigation-related activities, KW Deactivation & Demolition, Soil & Groundwater, and Waste and Fuels M-91 and Management of Cesium and Strontium Capsule (MCSC) Project.
 - In May, supported response to the PUREX Tunnel collapse incident and reviewing similar structures with potential for external aging-related issues. Took part in multiple meetings and reviewing recovery plans.
 - Supported multiple project's technical requests, including assistance with alternative M-91 transuranic (TRU) processing facilities, alternative disposal analysis from Waste Treatment Plant (WTP) cold run waste, Building 224B processes, Buildings 215C/276C, and the MCSC project. Continued support of ERDF radionuclide disposals and modifications to Waste Management Information System (WMIS) inventory tracking with RL, ERDF operations management, and Risk & Modeling Integration, which supports the issuance of the annual surveillance and maintenance review required by the ERDF performance assessment.
 - Held a Productivity Tracking Log meeting with the projects in May. Discussed company-level metrics, and the projects briefed their metrics of productivity delays and efficiencies.

PTS

- Engineering Services
 - o Continued company- and site-wide committee coordination activities for implementation of a revision to the site-wide electrical safety procedure.
 - o Prepared electrical safety information to be presented in Safety Tailgate material during Electrical Safety Month in May.
- Training and Procedures
 - o Completed training analysis for RCCC Safety and Health Procedures transition.
 - o Staffed Emergency Operations Center (EOC) in support of the PUREX Tunnel emergency response.
 - o Monitored reduction of force employees to cancel un-necessary training.
- Operations Program
 - o ConOps/Work Control/Conduct of Work
 - Conducted Quarterly Work Control Managers meeting.
 - Final reviews of General Industrial Hazards Analysis and Craft Specific Hazards Analysis.
 - Completed analysis for April Monthly CAS/CAM performance indicators.
 - Developed new PIs for conduct of work improvement.
 - Supported efforts on 324 Building procedure transition ConOps, Maintenance, Work Control, measuring and testing equipment.
 - Supported a lockout/tagout (LOTO) facility annual review at Waste and Fuels Maintenance Project (WFMP) facilities for follow-up work site assessment.

- o Emergency Preparedness (EP)
 - Working third quarter EP assessment.
- Project Delivery
 - o Federal Building Upgrades
 - Continued carpet cleaning, patching, and painting walls as rooms are vacated.

Communications

- More than 60 news stories were generated globally, nationally, regionally, and locally regarding the PUREX Tunnel collapse at the Hanford site.
- Communications supported RL in the following public involvement activities:
 - o Hanford Advisory Board (HAB) tour that included stops at the 324 Building, 300 Area for groundwater, PFP, MASF, WESF, and 200 West Pump and Treat Facility.
- Communications supported RL in conducting interviews and providing information that generated the following articles in the media:
 - o *Tri-City Herald* (May 2, 2017): 324 Building Progress – “[Workers prepare to tackle Hanford’s potentially deadly spill](#)”
 - o Weapons Complex Monitor (May 5, 2017) – “[Hands-on Work Resumes on Hanford 324 Building Demolition](#)”
- Communications supported RL in the development of several social media posts, including:
 - o PFP Demolition time lapse.
 - o STP acceptance testing begins.

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Office of the President	0.1	0.1	0.1	0.0	0.0%	0.0	8.5%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	0.0	-1.8%
General Counsel	0.1	0.1	0.1	0.0	0.0%	0.0	31.2%
Communications	0.1	0.1	0.1	0.0	0.0%	0.0	-2.1%
Safety, Health, Security and Quality	1.3	1.3	1.0	0.0	-0.1%	0.3	26.0%
Environmental Program and Strategic Planning	0.5	0.5	0.4	0.0	0.0%	0.1	22.6%
Business Services	2.0	2.0	2.3	0.0	0.0%	(0.3)	-15.0%
Prime Contract and Project Integration	2.0	2.0	1.8	0.0	0.0%	0.2	11.7%
Project Technical Services	0.6	0.6	0.5	0.0	-0.2%	0.1	11.1%
Indirect WBS 000 Total	6.9	6.9	6.4	0.0	0.0%	0.5	7.4%

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: (+\$0.5M/+7.4%)

The CM positive cost variance is primarily due to open vacancies across the indirect accounts, as well as lower than planned on-demand services for information resource and technology management support. Also contributing to the positive cost variance is direct charging in support of the PUREX Tunnel and PFP project. Additionally, the National Beryllium Program continues to experience decreased activity as the Beryllium Corrective Action Plan has concluded and the awareness group meetings are required less frequently.

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	1.2	1.2	1.2	0.0	0.0%	0.0	-2.3%	1.8
Internal Audit	0.7	0.7	0.5	0.0	0.0%	0.3	37.1%	1.2
General Counsel	1.0	1.0	0.8	0.0	0.0%	0.2	17.1%	1.5
Communications	0.7	0.7	0.8	0.0	0.0%	(0.1)	-15.8%	1.1
Safety, Health, Security and Quality	10.0	10.0	8.1	0.0	0.0%	1.9	19.4%	15.7
Environmental Program and Strategic Planning	3.7	3.7	2.8	0.0	0.0%	0.9	23.5%	5.8
Business Services	15.3	15.3	15.3	0.0	0.0%	0.1	0.5%	24.1
Prime Contract and Project Integration	15.6	15.6	13.4	0.0	0.0%	2.2	14.2%	24.5
Project Technical Services	4.8	4.8	4.5	0.0	0.1%	0.3	6.8%	7.5
Indirect WBS 000 Total	53.0	53.0	47.2	0.0	0.0%	5.7	10.8%	83.3

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: (+\$5.7M/+10.8%)

The FYTD positive cost variance is primarily due to continued lower-than-planned on-demand services for information resource and technology management support. Also contributing to the positive cost variance is open vacancies in the SHS&Q and Environmental Program & Strategic Planning organizations. Additionally, the National Beryllium Program has experienced a decrease in activity as the Beryllium Corrective Action Plan has concluded and the Awareness Group meetings are required less frequently.

FY2017 G&A Analysis (\$M)

WBS 000 Project Services and Support	FY 2017					
	FYTD	FYTD	FYTD	FY2017	FY2017	FY2017
	BCWS	Actual	Variance (O)/U	BCWS	Forecast	Variance (O)/U
General & Administrative (G&A)	53.0	47.2	5.7	83.3	79.5	3.8
Office of the President	1.2	1.2	(0.0)	1.8	2.0	(0.1)
Internal Audit	0.7	0.5	0.3	1.2	0.9	0.2
General Counsel	1.0	0.8	0.2	1.5	1.3	0.2
Communications	0.7	0.8	(0.1)	1.1	1.3	(0.2)
Safety, Health, Security and Quality	10.0	8.1	1.9	15.7	13.6	2.2
Env. Program & Strategic Planning	3.7	2.8	0.9	5.8	4.7	1.1
Business Services	15.3	15.3	0.1	24.1	25.1	(1.0)
Prime Contract and Project Integration	15.6	13.4	2.2	24.5	22.7	1.8
Project Technical Services	4.8	4.5	0.3	7.5	7.9	(0.4)

FY2017		
G&A Distribution	(55.3)	(83.2)
G&A Liquidation (Over)/Under	(8.1)	(3.7)

Liquidation Analysis

For May, application of the G&A rate has over-liquidated total-to-date G&A cost by \$8.1 million. The FY2017 year-end projected over-liquidation of \$3.7 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. The year-end projected over-liquidation has been reduced from the prior month's projection due to an \$8.0 million passback factored into the June forecasts.

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

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

No key risks currently identified.

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

Appendix C Capital Asset Projects



May 2017
CHPRC-2017-05, 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)



T. E. Bratvold
Vice President for
Plutonium Finishing
Plant Closure
Project

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress continued to work toward critical decision (CD)-4 closure as teams continued to prep glovebox/hoods for extraction during demolition. It is expected that final preparations will be completed on June 26, 2017. At that time, gloveboxes will be staged until demolition of 234-5Z commences and completion of Capital Assets Project discrete scope will be completed. The total number of gloveboxes removed to date is 95 percent complete.

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

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
Glovebox/Hood Removed	-	1	174	166
COMPLETE KPP Rooms/Areas Ready for Demo	-	-	60	60 rooms/areas

KEY ACCOMPLISHMENTS

RL-0011_C1 Accomplishments

- Work remaining on this capital asset project is removal of the gloveboxes from the 234-5Z facility. All work associated with the glovebox process equipment removal has been completed. Final preparations to support the physical removal of the remaining gloveboxes will be completed by June 26, 2017. As the project nears the ready for demolition milestone for the 234-5Z building, additional gloveboxes will begin to be removed from the facility.
- Removed the HA-7A glovebox from the 234-5Z Facility and staged for shipment to Perma-Fix Northwest.
- Continued preparations for removal of HC-7C glovebox from 234-5Z. It is expected that the HC-7C Glovebox will be removed from the facility by the end of June 2017.

MAJOR ISSUES

None currently identified.

CORRECTIVE ACTION LOG

Reference Appendix C.1 Format 5 for specific corrective actions for this CAP.

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 spotlight chart: No major changes to the monthly spotlight chart in the month of May .						
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 the month of May .						
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)						
FY2017 Risk Triggers (Risk could be realized in FY2017)						
PFP-DEMO-21: Glove Box/Equipment Removal/Demolition Material Handling Event	A material handling event (e.g., dropped piece of process equipment) occurs during the Plutonium Finishing Plant (PFP) demolition, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$150K, 30 days			Risk Trigger: During pre-demolition/demolition activities in FY2017.		
				<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: Mitigation Assessment: No change in the month of May. The mitigation strategies have been put in place; as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to adhere to the CHPRC Integrated Safety Management System (ISMS) program/hoisting and rigging program to include detailed analyses of potential hazards and identification of preventive measures to implement prior to starting the work. At this time, no alternative course of actions are needed.</p>	Mitigation action(s)	FC Date
Mitigation action(s)	FC Date	%				
None identified at this time.	N/A	N/A				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)						
No high threat value risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in the month of May .						
Unassigned Risks (Pending ownership of identified risks/opportunities)						
No unassigned risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in the month of May .						

CRITICAL PATH SCHEDULE

The PFP Critical Path Schedule begins with the continuation of demolition on the first floor of 236-Z Plutonium Reclamation Facility (PRF). The leads to the removal of the four Gallery gloveboxes in PRF and then demolition of the PRF canyon. Once completed, demolition will begin on the Remote Mechanical A (RMA) Process Line and RMC Process Line in the 234-5Z building. Finally, demolition of the Radioactive Acid Digestion Test Unit (RADTU) and basement areas completes the 234-5Z facility, as well as meeting the requirements for the Tri-Party Agreement Milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*.

SCHEDULE MARGIN/MANAGEMENT RESERVE

Reference Appendix C.1 Formats 1, 2, 3, and 5 for specific schedule margin/Management Reserve (MR) 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	11/30/17	11/10/2017	Progress continued to work toward CD-4 closure as teams continued to prep glovebox/hoods for extraction during demolition. It is expected that final preparations for the removal will be completed on June 26, 2017. At that time, gloveboxes will be staged until demolition of 234-5Z commences and completion of CAP.1 discrete scope will be completed. There was an eight-day loss for the month of May. This is a result of impacts from the PUREX Tunnel Collapse closing the site for access to PFP, and increased efforts to support removal of the HC-7C glovebox from the 234-5Z facility. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, it is expected that efficiencies will be recognized, evaluated, and as appropriate, implemented to help recover some of the schedule delays. The total gloveboxes removed to date is at 95 percent complete.

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

**Forecasted 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

Nothing to report at this time.

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



May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

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

DOLLARS IN Thousands of \$

FORM APPROVED
OMB No. 0704-0188

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) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 05 / 21	
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	12	85	12	-73	254,725	254,215	279,669	-510	-25,454	0	0	0	254,725	279,960	-25,235		
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	12	85	12	-73	315,152	314,642	332,249	-510	-17,607	0	0	0	315,152	332,541	-17,389		
f. MANAGEMENT RESERVE														2,393				
g. TOTAL	0	12	85	12	-73	315,152	314,642	332,249	-510	-17,607	0	0	0	317,545				

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 4 - STAFFING											FORM APPROVED OMB No. 0704-0188	
											Dollars in: FTE	
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) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788				b. PHASE				b. TO (YYYYMMDD) 2017 / 05 / 21	
			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)								ENTER SPECIFIED PERIODS				AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)												
			+1 JUN 2017 (4)	+2 JULY 2017 (5)	+3 AUG 2017 (6)	+4 SEPT 2017 (7)	+5 OCT 2017 (8)	+6 NOV 2017 (9)	1st Qtr FY18 (10)	FY18 (11)	FY19-LC (12)	ATCOMPLETE (13)			
35 - Business Services	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project	6	15424	8	1	5	6	0	0	0	0	0	0	0	0	15443
g. TOTAL DIRECT	6	15441	8	1	5	6	0	0	0	0	0	0	0	0	15460

CLASSIFICATION (When Filled In)

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) 2017/04/24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017/05/21	
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	12	85	12		-73	-625%		0.14
Cumulative:	315,152	314,642	332,249	-510	-0.2%	-17,607	-5.6%	1.00	0.95
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	315,152	332,541	-17,389	-5.5%		1.75			

Explanation of Variance/Description of Problem:

Current Period:
Schedule Variance: The schedule variance is due to working historical BCWS associated with Glovebox prep and removal activities in 234-5Z. The baseline assumed this scope would complete by November 2016 but work was re-sequenced to optimize other critical path activities at the PFP Facility (i.e., PRF read for demo, 242-Z Ready for demo and 234-5Z duct level).

Cost Variance: The cost variance is associated with resource limitations with removing 7A glovebox from facility and complications with finding a route for removal for the 7C glovebox contributed to higher costs this month.

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

Impact:
Impact: The RL-011.C1 project baseline completion date is February 16, 2016. The current schedule now reflects a completion date of November 10, 2017. There was an eight day loss for the month of May. This is a result of impacts from the PUREX Tunnel Collapse closing the site for access to PFP, and increased efforts to support removal of the HC-7C glovebox from the 234-5Z facility.

The current RL-11 performance schedule indicates that the PFP project will achieve slab-on-grade by September 11, 2017. The PFP project lost 11 days on the schedule from the May month end forecast completion date of the Tri-Party Agreement milestone for the PFP Project to reach Slab on Grade. This is a result of impacts from PUREX Tunnel Collapse closing the site for access to PFP, high winds, lightning storms, and increased efforts to load out debris from the PRF demolition efforts. Efficiencies have previously been identified in readying the 234-5Z facility for demolition wherein NDA and characterization data supports leaving more piping and ducting in place for demolition. In addition, efficiencies were recognized in 236-Z (PRF) wherein work was performed on filter boxes in parallel with the gallery gloveboxes which allowed for acceleration of the start of 236-Z demolition. This is turn accelerated when additional field team resources were reallocated from 236-Z to 234-5Z to get the facility ready for demolition. This is partially offset by delay in readying the 234-5Z facility for demolition as a result of lack of RCT resources. 234-5Z contains the gloveboxes requiring removal to meet the end state of the KPP and TPA milestone. The project expects to increase progress in the 234-5Z facility as all resources have been reassigned to complete the demo preparations in this facility. The PFP Project is currently on track to meet the re-negotiated TPA milestone M-083-00A due date of 9/30/17 for achieving slab-on-grade.

Cost Impact: The historical negative cost variance of ~\$17.6M and 5.6%, and CPI of .95 reflect impacts of the safety pauses, stop works, contamination events, and increased complexity of the HA-9A/HC-9B size reduction efforts and preparations and removal of the HA-7A, HC18M and HC-7C gloveboxes. This is partially offset by recognized efficiencies in cleaning up the RMA/RMC control rooms after completion of the size reduction efforts of the 9A/9B gloveboxes.

Cost variance is not considered recoverable as there is only a small amount of scope remaining to complete the KPP. As efficiencies continue to be recognized, the EAC will be adjusted.

Corrective Action:
No Corrective Actions Required

- No Corrective Actions Required**
- 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 May.
 - Forecast Schedule with No Baseline: None in the month of May.
 - UB Balance: None in the month of May.
 - Negative ACWP: None in the month of May.
 - EAC Analysis: Best Case = \$332,541; Most Likely = \$334,934; Worst Case = \$335,152
 - Negative CV > VAC: Scope to perform size reduction efforts on the high gram glovebox removal efforts was estimated to be completed in a much shorter time frame with much fewer resources than originally planned causing the large Cost Variance. The EAC is reflective of the current approach to perform the remaining work scope.
 - MR Transactions: None in the month of May.
 - Freeze Period Changes: None in the month of May.
 - Retroactive Changes: None in the month of May.
 - EVT Changes: None in the month of May.

*During the Month of April CHPRC kicked off the FY2018 comprehensive EAC process (ZZCSMILE1117A, Kickoff FY18 Annual Comprehensive EAC), and is expected to finish mid-September (ZZCSMILE1117B, Submit Final FY18 Annual Comprehensive EAC).

Prepared by: _____ Date: _____ Approved by: _____ Date: _____

Appendix C.2

Capital Asset Project

RL-0011.C2 - Demolition of PFP Facilities



T. E. Bratvold
Vice President for
Plutonium Finishing
Plant Closure
Project

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress continued to work toward critical decision (CD)-4 closure as teams continued to ready the Plutonium Finishing Plant (PFP) facilities for demolition. Demolition on the Plutonium Reclamation Facility (PRF) began on November 8, 2016. Completion of all demolition activities are scheduled to occur in September 2017.

The following are key metrics associated with this CAP.

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
Complete Cold and Dark/Demo Ready activities for 234-5Z	-	-	1	-
COMPLETE Cold and Dark/Demo Ready activities for 236-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 242-Z	-	-	1	1
Complete Cold and Dark/Demo Ready activities for 291-Z	-	-	1	-
Complete Cold and Dark/Demo Ready activities for PFP Ancillary Facilities	-	-	15	3
Complete Demolition of 234-5Z	-	-	1	-
Complete Demolition of 236-Z	-	-	1	-
COMPLETE Complete Demolition of 242-Z	-	-	1	1
Complete Demolition of 291-Z	-	-	1	-
Complete Demolition of PFP Ancillary Facilities	-	-	15	3
Turnover Facility to Long Term Surveillance & Maintenance	-	-	-	-

KEY ACCOMPLISHMENTS

RL-0011_C2 Accomplishments

- Continued demolition activities on the 236-Z Facility.

MAJOR ISSUES

- None currently identified.

CORRECTIVE ACTION LOG

Reference Appendix C.2 Format 5 for specific corrective actions for this CAP.

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.C3 (CAP.2)																			
Explanation of major changes to the project monthly spotlight chart:																			
Risk PFP-DEMO-05 Inclement Weather was realized during the month of May.																			
Realized Risks (Risks that are currently impacting project cost/schedule)																			
PFP-DEMO-05: Inclement Weather	Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will impact the demolition of PFP. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$0K, 32 days *Cost increase will result in cost per day impacts from crews and hotel load.	●	↓	<p>Risk Event: This risk was realized during the months of May due to high winds and lightening, limiting demolition activities.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <th colspan="3">Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td colspan="3">Obtain weather conditions for the area and adjust daily work scope/schedule accordingly.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: During the month of May the project was impacted by one day of high winds, which prevented demolition activities to be performed. The risk remains critical due to upcoming high-wind and high-heat weather having the ability to impact the planned demolition. The PFP project will continue to adjust the daily work scope to plan for projected weather impacts.</p>	Risk Recovery Action(s)			FC Date	%	Obtain weather conditions for the area and adjust daily work scope/schedule accordingly.			Ongoing	N/A					
Risk Recovery Action(s)			FC Date	%															
Obtain weather conditions for the area and adjust daily work scope/schedule accordingly.			Ongoing	N/A															
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																			
FY2017 Risk Triggers (Risk could be realized in FY2017)																			
PFP-DEMO-21: Glovebox/Equipment Removal/Demolition Material Handling Event	A material handling event (e.g., dropped piece of process equipment) occurs during the PFP demolition, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$150K, 30 days	●	↑	<p>Risk Trigger: During pre-demolition/demolition activities in FY2017.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <th colspan="3">Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td colspan="3">None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of May. The mitigation strategies have been put in place; as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to adhere to the CHPRC Integrated Safety Management System (ISMS) program/hoisting and rigging program to include detailed analyses of potential hazards and identification of preventive measures to implement prior to starting the work. At this time, no alternative course of actions needed.</p>	Mitigation action(s)			FC Date	%	None identified at this time.			N/A	N/A					
Mitigation action(s)			FC Date	%															
None identified at this time.			N/A	N/A															
PFP-DEMO-07: Removal/Extraction of Equipment Takes Longer Than Planned	Controlled demolition of equipment, gloveboxes, and portions of the crosscutting process support systems (i.e. ventilation) result in cost impacts and schedule delays. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$1.5 million, 60 days	●	↔	<p>Risk Trigger: During pre-demolition/demolition activities in fiscal year (FY) 2017. Dates tracked in the field execution schedule (FES).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <th colspan="3">Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td colspan="3">Identify and pre-rig equipment with lifting slings.</td> <td>06/30/17</td> <td>50</td> </tr> <tr> <td colspan="3">Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.</td> <td>06/30/17</td> <td>50</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of May. An effort will soon be taken to develop a removal path for several of the gloveboxes for Criticality Incredibility. If the opportunity presents itself, additional gloveboxes currently slated for removal during demolition (e.g. HC-227S, HC227T) will be removed during pre-demolition as risk mitigation strategy. At this time, no alternative course of actions are needed.</p>	Mitigation action(s)			FC Date	%	Identify and pre-rig equipment with lifting slings.			06/30/17	50	Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.			06/30/17	50
Mitigation action(s)			FC Date	%															
Identify and pre-rig equipment with lifting slings.			06/30/17	50															
Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.			06/30/17	50															

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0011/WBS-011.05.C3 (CAP.2)										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
PFP-DEMO-12: PFP/PRF Demolition Contamination Levels	Contamination levels on the canyon walls, floors, ventilation ducts, and the remaining areas of PFP will be higher than expected, thus requiring more stringent controls than expected or larger than expected waste volumes, resulting in cost impacts, and schedule delays. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$1.5 million, 22 days			Risk Trigger: During pre-demolition/demolition activities in FY2017. Dates tracked in the FES.						
				<table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>	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: At the end of January 2017, contamination was discovered outside the HCA/ARA/RA Zone established for demolition of the Plutonium Reclamation Facility (PRF) after a Continuous Air Monitor (CAM) alarm sounded just outside the HCA/ARA/RA during relocation of the debris pile. This resulted in the evaluation of employees from the zone and could have resulted in contamination of Plutonium Finishing Plant (PFP) personnel. As a result of this event, lessons learned have been incorporated in the future demolition work packages to ensure the suppression misting instructions are stated clearly with no subjective verbiage. In addition, in-process monitoring of the pile/bucket has been incorporated during movement of the debris pile.										
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of <i>May</i> .										

CRITICAL PATH SCHEDULE

The PFP Critical Path Schedule begins with the continuation of demolition on the first floor of 236-Z (PRF). The leads to the removal of the four Gallery Gloveboxes in PRF and then demolition of the PRF Canyon. Once complete, demolition will begin on the Remote Mechanical A (RMA) Process Line and Remote Mechanical C (RMC) Process Line in the 234-5Z building. Finally, demolition of the Radioactive Acid Digestion Test Unit (RADTU) and basement areas completes the 234-5Z facility, as well as meeting the requirements for the Tri-Party Agreement Milestone – M-083-00A - *PFP Facility Transition and Selection Disposition Activities*.

SCHEDULE MARGIN/MANAGEMENT RESERVE

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

CRITICAL DECISION MILESTONE STATUS

Number	Title	* Due Date	**Forecast Date	Status/ Comment
RL-011.C2	Completion Demolition of all PFP Facilities.	8/31/18	1/25/18	Progress continued to work toward CD-4 closure as teams continued to ready the PFP facilities for demolition. The PRF facility initiated demolition on November 8, 2016, and completion of demolition activities will occur in September 2017. There was an 11-day loss for the month of May. This is a result of impacts from the PUREX Tunnel Collapse closing the site for access to PFP, high winds, lightning storms, and increased efforts to load out debris from the PRF demolition efforts. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, it is expected that efficiencies will be recognized, evaluated, and as appropriate, implemented to help recover some of the schedule delays.

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

**Forecasted Date reflects CD-4 due date without DOE contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

DOE ACTIONS / DECISIONS

None to report at this time.

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



May 2017
CHPRC-2017-05, 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 RL_0011_C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2017 / 04 / 24													
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 05 / 21													
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18															
5. CONTRACT DATA																			
a. QUANTITY 1	b. NEGOTIATED COST 51,683	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 5,000	e. TARGET PRICE 56,683	f. ESTIMATED PRICE 49,477	g. CONTRACT CEILING 56,683	h. ESTIMATED CONTRACT CEILING 49,477												
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) Dickerson, Kala K	b. TITLE Prime Contract Compliance Manager													
a. BEST CASE		41,506			c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)												
b. WORST CASE		61,530																	
c. MOST LIKELY		44,477	51,683	7,206															
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	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)			
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)									
RL-0011 Nuclear Mat Stab & Disp PFP																			
RL_0011_C2.05 Disposition PFP Facility	136	546	1,527	410	-981	48,712	15,620	23,847	-33,092	-8,227	0	0	0	48,712	41,506	7,206			
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	136	546	1,527	410	-981	48,712	15,620	23,847	-33,092	-8,227	0	0	0	48,712	41,506	7,206			
f. MANAGEMENT RESERVE														2,971					
g. TOTAL	136	546	1,527	410	-981	48,712	15,620	23,847	-33,092	-8,227	0	0	0	51,683					
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																			
a. VARIANCE ADJUSTMENT																			
b. TOTAL CONTRACT VARIANCE										-33,092		-8,227		51,683		41,506		10,177	

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_C2 PFP Demolition Capital Asset Project			a. FROM (YYYYMMDD) 2017 / 04 / 24		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2017 / 05 / 21		
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18					

5. PERFORMANCE DATA

WBS.Resp Org Group 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)						
3B - PFP Closure Project	136	546	1,527	410	-981	48,712	15,620	23,847	-33,092	-8,227	0	0	0	48,712	41,506	7,206
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)	136	546	1,527	410	-981	48,712	15,620	23,847	-33,092	-8,227	0	0	0	48,712	41,506	7,206
f. MANAGEMENT RESERVE														2,971		
g. TOTAL	136	546	1,527	410	-981	48,712	15,620	23,847	-33,092	-8,227	0	0	0	51,683		

CLASSIFICATION (When Filled in)

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 4 - STAFFING										FORM APPROVED OMB No. 0704-0188	
										Dollars in: FTE	
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) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788				b. PHASE			b. TO (YYYYMMDD) 2017 / 05 / 21	
			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)								ENTER SPECIFIED PERIODS				AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)												
			+1 JUN 2017 (4)	+2 JULY 2017 (5)	+3 AUG 2017 (6)	+4 SEPT 2017 (7)	+5 OCT 2017 (8)	+6 NOV 2017 (9)	1st Qtr FY18 (10)	FY18 (11)	FY19-LC (12)	ATCOMPLETE (13)			
3B - PFP Closure Project	41	382	80	161	120	88	35	19	17	23	0	0	0	923	
g. TOTAL DIRECT	41	382	80	161	120	88	35	19	17	23	0	0	0	923	

CLASSIFICATION (When Filled In)

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) 2017/04/24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017/05/21	
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:		136.0	545.7	1,527.0	409.7	-981.3	-179.8%	4.01	0.36
Cumulative:		48,711.9	15,620.1	23,847.0	-33,091.7	-8,226.9	-52.7%	0.32	0.66
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:		48,711.9	41,505.8	7,206.0	14.8%	1.33	1.87		

Explanation of Variance/Description of Problem:

Current Month:

Schedule Variance: The schedule variance for the current month is due to working historical BCWS on discrete demolition activities (apportioned). The demolition activities were originally planned to be initiated in the third quarter of 2016, however, delays in getting the facilities ready for demolition negatively impacted the start of physical demolition. Demolition of 236-Z is currently scheduled to complete on July 31, 2017. This start of the demolition work for 291-Z and 234-5Z has been significantly impacted due to delays in getting the other PFP facilities ready for demolition. 291-Z demolition activities are scheduled to begin in the middle of June, 2017 and the implosion of the 291-Z stack is scheduled for July 15, 2017. In addition, the PUREX Tunnel collapse caused a four day delay due to closure of the Hanford site restricting access to PFP. Finally, demobilization activities, with the exception of on site manholes and underground injection controls cannot be performed until all buildings are demolished.

Cost Variance: The unfavorable cost variance relates to the progress on discrete demolition work scope (apportioned) (see the schedule variance explanation), while a constant staff provides D&D support services. Demo experienced delays from weather (wind), contamination events, and greater efforts to complete 236-Z demolition than originally planned. This resulted in charges being incurred with minimal performance claimed. In addition, 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 are contributing to the variance.

Cumulative to Date:

Schedule Variance: The cumulative schedule variance is due to delay of demolition of ancillary buildings and 236-Z caused by resources being redirected to support higher priority critical path work associated with decommissioning of 234-5Z, 242-Z, and 236-Z, as well as ready for demo activities associated with impacts from 236-Z Canyon Crane failure, contamination impacts from an unplanned criticality alarm failure, contamination recovery in the duct level of 234-5Z (two week delay in July 2016), increased characterization efforts, weather delays (snow and wind), recovery from demolition contamination events, and greater efforts to complete 242-Z demolition than originally planned. In addition, the PUREX Tunnel collapse caused a four day delay due to closure of the Hanford site restricting access to PFP. As a result of delays in the ready for demolition activities, the C2 CD-4 has been delayed but not in jeopardy of being met. However, the TPA milestone M-083-00A has been re-negotiated to a due date of 9/30/2017 and is expected to be achieved. This is partially offset by the completion of demolition of the 2729-Z, and 2727-Z facilities, removal of gloveboxes, the completion of demolition activities for the 2nd, 3rd, 4th, 5th, and 6th floors, South Canyon Airlock of 236-Z, demolition of 242-ZA, and completion of demolition activities in the 242-Z facility.

Cost Variance: The cumulative negative cost variance is associated with MSA subcontracted resources arriving to support PFP demolition that were planned as P/Q shift support with a baseline start date of February 2016. Because the project is behind schedule in initiating demolition activities, and because the decision was made not to execute demolition activities for the 236-Z/242-Z facilities on P/Q shift, these resources currently have limited work to support which contributes to inability to take performance until the ready for demolition work scope is completed. To ensure that the project is able to continue demolition activities as identified in the current schedule, these costs will continue to be realized resulting in a potential unrecoverable cost variance. 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. In addition, 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. Finally, 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 the contributing factor, as a result of the weather impacts and an unexpected contamination event in the PRF demolition zone. In addition unplanned Management Assessment efforts for the 234-5Z and 291-Z facilities took longer than originally assumed. This is partially offset by recognized efficiencies associated with the demolition of the 2727-Z and 2729-Z facilities, and the 242-ZA and 242-Z Facilities.

Impact:

Schedule Impact: Work efforts in getting 234-5Z ready for Cold & Dark resulted in a loss of 11 days for the month of May. This is a result of impacts from the PUREX Tunnel Collapse closing the site for access to PFP, high winds, lightning storms, and increased efforts to load out debris from the PRF demolition efforts. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, it is expected that continued efficiencies will be recognized, evaluated, and implemented as schedule delays occur. The baseline completion date is not considered recoverable. The TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities of September 30, 2017 and is expected to be achieved.

Cost Impact: Stop Works, Safety Pauses, multiple contamination events, the PRF Crane failure, and associated recovery actions have negatively impacted the field work to ready 234-5Z, 236-Z, 242-Z, and 291-Z for demolition. In addition, readiness activities took longer than originally assumed as a result of increased requirements required by the Readiness Assessment team to demonstrate readiness for demolition of the PRF facility and efforts to mobilize took longer than originally assumed as a result of implemented recommendations from the readiness assessment team. An unplanned Management Assessment for the 234-5Z and 291-Z facilities to incorporate lessons learned from the demolition of the 236-Z and 242-Z facilities are also contributing to the cost impacts. Finally, in the early stages of this project subcontracted MSA resources specializing in facility demolition charged the project until the ready for demo status was achieved. In addition an unexpected contamination event that occurred during demolition of the PRF facility in January, 2017, and 242-Z has contributed to the cost impacts on this project.

The positive VAC is reflective of working one shift during demolition of 236-Z and 242-Z facilities rather than two as planned in the PMB. In addition, the duration for demolition of 234-5Z has been adjusted as it has been determined that due to the time of year demolition will occur, the number of days to demolish the facility will be less than originally planned. This reduces the amount of demolition and supervision labor resources needed, resulting in the reduction of EAC to BCWS values.

Corrective Action:

Cost: MSA subcontracted resources (e.g., Heavy Equipment Operators, Crane Operators, Mechanics, etc.) will continue to be loaned out to other CHPRC and other Hanford contractors when the PFP project can support the needs of others and this offset unnecessary costs to the PFP Project. Action Ruben Trevino due 6/30/17

Schedule: Since weather impacts cannot be prevented and the mechanical failures were expected after reintroducing the equipment into service after sitting idle for an extended period of time, the only recovery is to work overtime when appropriate to attempt to recover schedule. Action: Ruben Trevino due 5/31/2017

The PFP Project will initiate a tropical shift beginning early June to account for the summer temperatures allowing demolition activities to continue for an entire shift. Action: Bratvold 6/30/17

NOTE: Corrective actions associated with stop works/safety pauses, contamination events, and 236-Z Canyon Crane failure, and additional asbestos removal activities that are impacting the ability to initiate demolition activities in the RL-011.C2 capital asset project were previously addressed in the Operations project corrective action plan.

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

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

1. Schedule Margin Analysis: In the EAC there is currently no remaining schedule margin in this capital asset account. Schedule margin was lost in May 2016 as a result of impacts from stop works associated with PremAire breathing air issues related to size reduction of the HA-9A glovebox and impacts from a safety pause associated with a PremAire Breathing Air radiological event resulting in increased survey requirements for PPE and a requirement for removing additional asbestos in the 234-5Z facility prior to demolition activities commencing.
2. IMS Data dictionary Changes: No change in the month of May
3. Forecast Schedule with No Baseline: No change in the month of May
4. UB Balance: No change in the month of May
5. Negative ACWP: No change in the month of May
6. EAC Analysis: Best Case = \$41,506; Most Likely = \$44,477; Worst Case = \$61,530
7. Negative CV > VAC: No change in the month of May
8. MR Transactions: No change in the month of May
10. Retroactive Changes: No change in the month of May
11. EVT Changes: No change in the month of May

*During the Month of April CHPRC kicked off the FY2018 comprehensive EAC process (ZZCSMILE1117A, Kickoff FY18 Annual Comprehensive EAC), and is expected to finish mid-September (ZZCSMILE1117B, Submit Final FY18 Annual Comprehensive EAC).

Prepared by:

Date:

Approved by:

Date:

Appendix C.3
Capital Asset Project
RL-0012_C1_1 - Sludge Retrieval Project
15-D-401



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

T Plant facility modifications for sludge storage are projected to complete on May 24, 2017 (PM-12-4-17).

Initiated K-Basin Pre-operational Acceptance Testing (KPAT) on April 20, 2017, testing continued throughout May and is forecast to complete on October 11, 2017.

Prepared Final Safety Analysis Report/Technical Safety Requirements (FSAR/TSR) revision to facilitate KPAT integrated testing. Formal submission is forecast for May 31, 2017, and RL approval is anticipated prior to end of the June.

Continued working with RL to address comments arising from Documented Safety Analysis (DSA)/TSR revision submitted on April 12, 2017. RL approval is required by June 30, 2017, to avoid impacts to project critical path.

Based upon discussions between RL and CHPRC Senior Management, the Sludge Treatment Project (STP) Team has modified the Field Execution Schedule (FES) to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant in fiscal year (FY) 2018. On March 27, 2017, CHPRC formally submitted letter CHPRC-1701045 R1 - *Contract Number DE-AC06-08RL14788 – Change Proposal CP 012 PRC 1646, Revision 0, Sludge Removal Project Acceleration of 105K and T Plant* for RL approval. RL responded with Change Proposal (CP) Request For Information (RFI) – 1646-1, 2, & 3, dated April 28, 2017, May 12, 2017, and May 17, 2017, respectively. CHPRC is reviewing the RFIs and will transmit responses to RL in June. In order to meet the accelerated schedule, support from CHPRC and RL is required for the following assumptions:

- Significant overtime/weekend work is required to reduce the schedule duration.
- Approval of the integrated 105KW DSA must not affect the project critical path. This integrated DSA/TSR includes as-built information from installation activities and, therefore, a subsequent “as-built” DSA/TSR submittal is not required.
- Sludge Removal Project (SRP) critical decision (CD)-4 approval must occur concurrently with commencing sludge retrieval operations.
- Approval of the T Plant safety documentation must be completed within 120 days of submittal.
- To demonstrate the current forecast date of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) M-016-175, *Begin Sludge Removal From 105-KW Fuel Storage Basin*, the milestone has been disconnected from the risk analysis schedule margin. The current, non-risk adjusted forecast date to begin sludge removal is January 29, 2018.

The effort to retrieve and containerize the sludge pile in the KW Basin Center Bay discovered during debris mapping continued as resources allow.

Project breakdown structure (PBS) RL-0012 scope is 91 percent complete, and performance to date is positive, with a cumulative Schedule Performance Index (SPI) of 1.00 and a cumulative Cost Performance Index (CPI) of 1.05.

KEY ACCOMPLISHMENTS

RL-0012 C1 1 Accomplishments

KW Basin Sludge Removal Capital Asset Project

- KPAT / Construction
 - Initiated KPAT testing on April 20, 2017. Completed a substantial number of component level and system leak tests. The test is approximately 10 percent complete.
 - Completed final installation of rolling stairs and bumper transition to Sludge Transportation System (STS) trailer.
 - Completed annual preventative maintenance (PM) on Annex overhead roll-up door, including both drop tests and resets.
 - Completed Radiation Monitoring System equipment cables along with final terminations and locations for equipment.
 - Completed power-up and started the Annex Ion Exchange Module (IXM) simulator to support KPAT.
 - Remobilized STS trailer into Annex loading bay and re-connected hoses to Sludge Transport & Storage Container (STSC) to support KPAT.
- The proposed revision to the current 105KW Basin FSAR and TSR to support KPAT testing was reviewed with the RL Nuclear Safety Division (NSD) staff and their feedback was incorporated. The updated documentation is in internal review and will be formally submitted on May 31, 2017, to RL for approval. The change consists of an additional safety basis design feature to prevent lowering an XAGO (Sludge Retrieval) tool into an Engineered Container containing sludge, thereby preventing sludge retrieval during KPAT. Approval of this change will authorize execution (from a Nuclear Safety Basis perspective) of integrated system testing during KPAT using basin water. The new 105KW Facility DSA and TSR must still be approved by June 30, 2017, to allow sufficient time to support training, procedure development, formal safety basis implementation, and completion of readiness preparations prior to the Operational Readiness Review (ORR) that will authorize full-up Engineered Container Retrieval and Transfer System (ECRTS) Operation.
- CHPRC Transportation Safety (TS) personnel provided proposed disposition/resolution to the DOE-HQ, EA-41 comments on the One Time Request for Shipment (OTRS) Document. CHPRC TS personnel are awaiting concurrence from DOE. TS has also completed a draft OTRS implementation compliance matrix. OTRS approval is forecast in July.
- The Maintenance and Storage Facility (MASF) Pre-operational Acceptance Test (MPAT) report was approved by the STP Joint Test Group on January 31, 2017. However, comment incorporation and issuance has been given a lower priority than development and approval of KPAT specifications/procedures. The MPAT test report is forecast to complete in June 2017.
- ECRTS Procurement: STSC Vessels and Installation of STSC Instrumentation/Appurtenances continued through the fiscal month. The project is on track to complete the first 12 STSC Assemblies by September 30, 2017 – four of 12 STSC assemblies have been completed as of May month-end. American Boiler Works (ABW) will also complete fabrication of the final 11 STSC Shells by September 30, 2017. Once the final 11 STSC shells are fabricated, they will be transported to HiLine for installation of associated instrumentation and appurtenances.
- Progress continues in development of the Operations and Maintenance Procedures supporting sludge removal and packaging operations.
- Readiness documentation development continued as planned.

MAJOR ISSUES

Sludge Removal Project

Issue:

The schedule for receipt and implementation of the integrated DSA/TSR for the 105KW Basin/Annex will no longer support the KPAT integrated test without pushing the SRP critical path.

Corrective Action:

CHPRC updated the DSA/TSR to incorporate RL comments and retransmitted the document set to RL for approval. Simultaneously, a revision to the existing FSAR has been prepared, approved, and submitted to RL for review/approval. This FSAR revision should enable execution of integrated KPAT without impacting SRP critical path.

Status:

CHPRC personnel updated the Integrated DSA/TSR to incorporate comments provided by the RL Safety Basis Review Team (SBRT) and retransmitted the updated files to RL on April 12, 2017, via CHPRC-1700081AR3 - *Transmittal of PRC-STP-00946, Revision 0, 105KW Facility Documented Safety Analysis, PRC-STP-00992, Revision 0, 105KW Facility Technical Safety Requirements, and HNF SD SNF-FHA-001, Revision 5, Fire Hazards Analysis for the 105KW Facility*. The current schedule forecast for RL approval is June 30, 2017.

In order to prevent a schedule delay on the initiation of the integrated KPAT, CHPRC submitted a revision to the FSAR/TSR for the 105KW Basin that addresses the control necessary to facilitate completion of that integrated test. The FSAR revision is forecast to be approved by RL by the end of June.

CORRECTIVE ACTION LOG

Reference Appendix C.3 Format 5 for specific corrective actions for this CAP.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																								
		Month	Trend																									
RL-0012/WBS-012 (CAP)																												
Explanation of major changes to the project monthly spotlight chart:																												
Modified risk statement for STP-067A Safety Classification of SSC's – DSA/TSR to include RL approval delays associate with key safety documentation.																												
Realized Risks (Risks that are currently impacting project cost/schedule)																												
STP-072: Delayed STSC/ECRTS Procurement & Delivery	Material delivery and fabrication issues at ECRTS vendor facilities delay the delivery of the components to the Sludge Treatment Plant (STP) resulting in cost impacts and schedule delays. Additionally, discovery of additional components requiring fabrication results in deliveries that challenge project baseline schedules. Risk Handling Strategy: Control Probability: Very Likely (>90%) Worst Case Impacts: \$3 million, 120 days			<p>Risk Event: Event 1: In order to establish a reliable Sludge Transportation System Cask configuration capable of meeting the project's needs, several ports must be reconfigured to ensure reliable leak-tight integrity. This discovery was outside of baseline material procurement plans.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Event 1 - Finalize Field FES activities dates consistent with change orders.</td> <td>12/7/16</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Complete Procurement/Fabrication.</td> <td>12/7/16</td> <td>Complete</td> <td>90</td> </tr> <tr> <td>Deliver equipment to 100K Area.</td> <td>12/7/16</td> <td>Complete</td> <td>90</td> </tr> <tr> <td>Replace STS Cask Seals.</td> <td>12/7/16</td> <td>07/31/17</td> <td>0</td> </tr> <tr> <td>Conduct post repair leak test.</td> <td>12/7/17</td> <td>08/29/17</td> <td>0</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Event 1: Additional leak test tooling has been placed on order and is scheduled to arrive in June. Proof test on new seal will likely be delayed until fabrication of Cask Leak Test Tool and qualification by Nondestructive examination (NDE) Contractor.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Event 1 - Finalize Field FES activities dates consistent with change orders.	12/7/16	Complete	100	Complete Procurement/Fabrication.	12/7/16	Complete	90	Deliver equipment to 100K Area.	12/7/16	Complete	90	Replace STS Cask Seals.	12/7/16	07/31/17	0	Conduct post repair leak test.	12/7/17	08/29/17	0
Risk recovery action(s)	Risk Date	FC Date	%																									
Event 1 - Finalize Field FES activities dates consistent with change orders.	12/7/16	Complete	100																									
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Deliver equipment to 100K Area.	12/7/16	Complete	90																									
Replace STS Cask Seals.	12/7/16	07/31/17	0																									
Conduct post repair leak test.	12/7/17	08/29/17	0																									
STP-067A Safety Classification of SSCs - DSA/TSR	RL requires CHPRC to upgrade the safety classification of systems, structures, and/or components to a more conservative safety classification, requiring CHPRC to revise key safety documentation (DSA and TSR), procedures and/or design(s). Upon submittal of revised Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR), procedures and/or design(s), RL approval takes longer than the assumptions planned for in the baseline. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$300K, 120 days			<p>Risk Event: CHPRC sent the DSA and TSR to RL for review and approval on October 20, 2016, in letter CHPRC-1604692. RL rejected this submittal via correspondence 1700081A/17-NSD-0006. CHPRC resubmitted the DSA/TSR via CHPRC-1700081A R3. The original project baseline included 120 calendar days for RL to approve the safety basis document; however, it has now been 214 days (as of May 21, 2017) since the original submittal with formal approval still not imminent.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Solicit Senior RL & CHPRC involvement in resolving deficiencies.</td> <td>1/28/17</td> <td>As Needed</td> <td>N/A</td> </tr> <tr> <td>Conduct interface meetings between RL Safety Basis Review Team (SBRT) & CHPRC Nuclear Safety personnel to negotiate a product that is acceptable to RL.</td> <td>1/28/17</td> <td>As Required</td> <td>55</td> </tr> <tr> <td>CHPRC to appoint an independent facilitator to assist in resolution of RL comments.</td> <td>1/28/17</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Prepare a change order to obtain Management Reserve for realized risk.</td> <td>1/28/17</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Recovery Action Assessment: RL & CHPRC Senior Management have met multiple times in an attempt to resolve differences on the DSA/TSR Submittal. All DSA/TSR comments from the initial submittal were dispositioned as of February 17, 2017. CHPRC resubmitted an updated version of the DSA/TSR incorporating RL comments on March 12, 2017. Obtaining RL concurrence on comment resolution is in progress and is now forecasted to complete on June 1, 2017. The current forecast for receiving a SER approving the DSA/TSR is June 30, 2017. Once CHPRC has received SER and confirmed no changes to assume safety classification is needed, this risk may be closed.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Solicit Senior RL & CHPRC involvement in resolving deficiencies.	1/28/17	As Needed	N/A	Conduct interface meetings between RL Safety Basis Review Team (SBRT) & CHPRC Nuclear Safety personnel to negotiate a product that is acceptable to RL.	1/28/17	As Required	55	CHPRC to appoint an independent facilitator to assist in resolution of RL comments.	1/28/17	Complete	100	Prepare a change order to obtain Management Reserve for realized risk.	1/28/17	Complete	100				
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Prepare a change order to obtain Management Reserve for realized risk.	1/28/17	Complete	100																									

Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0012/WBS-012 (CAP)																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																			
No critical risks identified in the month of <i>May</i> .																			
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
FY2017 Risk Triggers (Risk could be realized in FY2017)																			
STP-103: K Basin Pre-Operational Acceptance Testing (KPAT) & ECRTS Startup	The ECRTS equipment does not operate as expected, requiring increased engineering, startup, operations, and construction. Firm Fixed Price contractor support; as well as equipment replacement, procurement, and retesting. Realization of this risk would also require additional training, procedure revision, and design modifications because of construction testing and/or Lines of Inquiry for Readiness Review resulting in cost impacts and schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$4.5 million, 90 days			Risk Trigger: 1) The ECRTS equipment does not operate as expected. 2) Unexpected attrition of critical testing personnel.															
		<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Develop and refine procedures based upon feedback from testing and operations personnel.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Utilize overtime to offset schedule impacts.</td> <td>As Needed</td> <td>N/A</td> </tr> <tr> <td>Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.</td> <td>As Needed</td> <td>N/A</td> </tr> </tbody> </table>			Mitigation action(s)	FC Date	%	Develop and refine procedures based upon feedback from testing and operations personnel.	Complete	100	Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.	Complete	100	Utilize overtime to offset schedule impacts.	As Needed	N/A	Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A
Mitigation action(s)	FC Date	%																	
Develop and refine procedures based upon feedback from testing and operations personnel.	Complete	100																	
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Utilize overtime to offset schedule impacts.	As Needed	N/A																	
Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A																	
Mitigation Assessment: KPAT Testing is in progress. No significant equipment failures as of 5/21/17.																			
Unassigned Risks (Pending ownership of identified threats/opportunities)																			
No unassigned risks identified in the month of <i>May</i> .																			

CRITICAL PATH SCHEDULE

The critical path flows through KPAT. This test will confirm that the Sludge Removal Project (SRP) hardware is installed properly and functions consistent with the design. Following a successful Contractor & DOE Operational Readiness Review, RL will provide Authorization to Commence Retrieval Operations in parallel with the DOE-HQ review/approval of CD-4. Completing retrieval operations, including the filling of STSCs with sludge and transferring them to T Plant, to complete Tri-Party Agreement Milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin*, is outside the current contract period in FY2019. However, the STP team has modified the FES to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant in FY2018.

SCHEDULE MARGIN/MANAGEMENT RESERVE

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

CRITICAL DECISION MILESTONE STATUS

Number	Title	*Due Date	**Forecast Date	Status/ Comment
15-D-401	CD-4, Project Completion	11/30/2019	8/11/2018	The forecast date includes schedule margin from the project's risk analysis. Project schedule margin is 123 days. The current forecast date before schedule margin and allowance for CD-4 is January 29, 2018.

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

**Forecasted Date reflects CD-4 due date without DOE contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	RL Due Date
RL Review & Comment on Emergency Planning Hazard Assessment (EPA)	5/22/17(A)	7/10/17
RL Issue SER for KW Facility DSA/TSR	4/11/17(A)	6/30/17
RL Concur on KW Facility DSA/TSR Comment Resolution	4/11/17(A)	6/15/17
RL Prepare KW Facility DSA/TSR SER	4/11/17(A)	6/27/17
RL Review KPAT FSAR / TSR Change	5/31/17	6/24/17
RL SRB Review of KW Facility DSA/TSR	4/11/17(A)	6/23/17
RL Approve / Comment Plan of Action (POA) - K-Basins	5/25/17	6/19/17
RL Final Approval of POA - K-Basins	6/24/17	6/30/17
RL Approve OTRS	6/01/17	7/17/17

Appendix C.3

RL-0012_C1_1 – Sludge Retrieval Project 15-D-401

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



May 2017
CHPRC-2017-05, 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													FORM APPROVED OMB No. 0704-0188								
											DOLLARS IN	Thousands of \$									
1. CONTRACTOR			2. CONTRACT				3. PROGRAM				4. REPORT PERIOD										
a. NAME CH2M HILL Plateau Remediation Company			a. NAME Plateau Remediation Contract				a. NAME 15_D_401 KW Basin Sludge Removal Project				a. FROM (YYYYMMDD) 2017 / 04 / 24										
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788		b. PHASE		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18				b. TO (YYYYMMDD) 2017 / 05 / 21										
c. TYPE CPAF			d. SHARE RATIO																		
5. CONTRACT DATA																					
a. QUANTITY 1	b. NEGOTIATED COST 295,873	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 7,950	e. TARGET PRICE 303,823	f. ESTIMATED PRICE 296,181	g. CONTRACT CEILING 303,823	h. ESTIMATED CONTRACT CEILING 296,181					i. DATE OF OTB/OTS (YYYYMMDD)									
6. ESTIMATED COST AT COMPLETION																					
			MANAGEMENT ESTIMATE AT COMPLETION (1)		CONTRACT BUDGET BASE (2)		VARIANCE (3)		7. AUTHORIZED CONTRACTOR REPRESENTATIVE												
			282,535						a. NAME (Last, First, Middle Initial) Dickerson, Kala K				b. TITLE Prime Contract Compliance Manager								
a. BEST CASE			290,038						c. SIGNATURE				d. DATE SIGNED (YYYYMMDD)								
b. WORST CASE			288,231		295,873		7,642														
c. MOST LIKELY																					
8. PERFORMANCE DATA																					
CAPN.PBS Control Account.PARS 2 WBS (2)		CURRENT PERIOD									CUMULATIVE TO DATE			REPROGRAMMING ADJUSTMENTS			AT COMPLETION				
		BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE					BUDGETED		ESTIMATED		VARIANCE
ITEM (1)	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)					
RL-0012 SNF Stabilization & Disp																					
RL_0012_C1_1.16 Sludge Treatment Project	0	0	26	0	-26	156,861	156,861	156,786	0	75	0	0	0	156,861	156,786	75					
RL_0012_C1_1.17 D-401 KW Basin Sludge Removal Project	3,751	2,695	2,239	-1,056	456	111,446	111,401	103,530	-45	7,871	0	0	0	133,147	125,749	7,397					
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	3,751	2,695	2,265	-1,056	430	268,307	268,262	260,316	-45	7,946	0	0	0	290,008	282,535	7,472					
f. MANAGEMENT RESERVE														5,695							
g. TOTAL	3,751	2,695	2,265	-1,056	430	268,307	268,262	260,316	-45	7,946	0	0	0	295,703							
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																					
a. VARIANCE ADJUSTMENT																					
b. TOTAL CONTRACT VARIANCE													-45		7,946		295,703		282,535		13,168

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

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

DOLLARS IN Thousands of \$

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME 15_D_401 KW Basin Sludge Removal Project		a. FROM (YYYYMMDD)	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		2017 / 04 / 24	
		c. TYPE CPAF		d. SHARE RATIO		b. TO (YYYYMMDD)	
				c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18		2017 / 05 / 21	

WBS.Resp Org Group	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)								
3G - K Basin Oper & Plateau Remediation Project	3,751	2,695	2,265	-1,056	430	268,307	268,262	260,316	-45	7,946	0	0	0	290,008	282,535	7,472		
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)	3,751	2,695	2,265	-1,056	430	268,307	268,262	260,316	-45	7,946	0	0	0	290,008	282,535	7,472		
f. MANAGEMENT RESERVE														5,695				
g. TOTAL	3,751	2,695	2,265	-1,056	430	268,307	268,262	260,316	-45	7,946	0	0	0	295,703				

CLASSIFICATION (When Filled In)

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 4 - STAFFING				FORM APPROVED OMB No. 0704-0188
			Dollars in: FTE	
1. CONTRACTOR		2. CONTRACT		4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. FROM (YYYYMMDD)
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		2017 / 04 / 24
		c. TYPE CPAF		b. TO (YYYYMMDD)
		d. SHARE RATIO		2017 / 05 / 21
		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18		

5. PERFORMANCE DATA														
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 JUN 2017	+2 JULY 2017	+3 AUG 2017	+4 SEPT 2017	+5 OCT 2017	+6 NOV 2017	1st Qtr FY18	FY18	FY19-LC	ATCOMPLETE		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(15)	
3G - K Basin Oper & Plateau Remediation Project	71	6842	75	73	76	78	79	66	49	91	0	0	0	7429
g. TOTAL DIRECT	71	6842	75	73	76	78	79	66	49	91	0	0	0	7429

CLASSIFICATION (When Filled In)

Appendix C.4
Capital Asset Project
RL-0041_C1 – Project 618-10, 316-4 and
600-63 Waste Sites



T. L. Hobbes
Vice President for
618-10 Burial Ground

May 2017
CHPRC-2017-05, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Work at the 618-10 Burial Ground and 316-4 Waste Site accelerated ahead of schedule in the month of May. The retrieval of waste from the Steel Vertical Pipe Units (VPU) was completed ahead of schedule. Mass excavation of soil from the 618-10 Trench resulted in a large number of cans being shipped to the Environmental Restoration Disposal Facility (ERDF). Overburden excavation from the 316-4 Waste Site continued as planned, and excavation of the contaminated soil was ahead of schedule. Planning for excavation at the 600-63 Waste Site continued, and steps were taken to prepare for this excavation project. In addition, the project supported the development of a Truthful Cost or Pricing Data (TCOPD) deliverable that is anticipated to be sent to RL late in the month of May.

KEY ACCOMPLISHMENTS

618-10 Burial Ground

- **618-10 Burial Ground Vertical Pipe Units (100 percent complete)**
 - Completed 13 Steel VPU retrieval segments, with a total of 60 retrieval segments completed out of 60.
 - Steel VPU retrieval declared complete on May 8, 2017.
- **618-10 Burial Ground Mass Excavation (41 percent complete)**
 - 21,246 tons of contaminated soil sent to ERDF; 66,707 total tons sent to ERDF to date.

316-4 Waste Site Excavation (92 percent complete)

- Continued excavation of contaminated soil column – 461 cans (9,838 tons) sent to ERDF.
- Excavated 13,992 tons of overburden soil; 301,708 tons excavated to date.

600-63 Waste Site

- Power disconnected from light pole near site; lighting fixtures and power cable removed in preparation for excavation activities.

618-10 Burial Ground Complex Demobilization

- Shipped 124 ecology blocks and an excavator to 200E area in support of the PUREX recovery actions.
- Transported 133 empty drums off-site for reuse.
- Shield boxes sent to the Plutonium Finishing Plant for reuse.
- Majority of waste site fencing removed from the 618-10 Burial Ground area.

MAJOR ISSUES

No major issues to report on at this time.

CORRECTIVE ACTION LOG

Reference Appendix C.4 Format 5 for specific corrective actions for this CAP.

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-0041/WBS-041															
Explanation of major changes to the project monthly spotlight chart: No major changes to the monthly spotlight chart in the month of <i>May</i> .															
Realized Risks (Risks that are currently impacting project cost/schedule)															
RCC-316-4-09: 316-4 Discovery of Unexpected Waste/ Contamination	Discovery of unexpected waste/contamination, waste/contamination quantities above what is assumed, waste/contamination that is above and beyond COCs and/or waste profile, and/or waste/contamination is found in the assumed clean area of the design. Resulting in greater than planned RAD controls resulting in cost and schedule impacts. Risk Handling Strategy: Accept Probability: Very Low (<10%) Worst Case Impacts: \$240K, 48 day	●	↔	Risk Event: On Tuesday, November 29, 2016, CHPRC discovered debris (wood, metal, etc.) in the 316-4 overburden removal, and then on Wednesday, November 30, 2016, radiological contaminated soil and contaminated debris (plastic and piping) was encountered that was buried in the top six feet of overburden at the 316-4 waste site. On Wednesday, January 4, 2017, and Tuesday, January 24, 2017, additional contamination was discovered. Contamination was discovered approximately four feet above the anticipated location on March 27, 2017. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 70%;">Risk recovery action(s)</th> <th style="width: 10%;">Risk Date</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Send backfill stockpile to ERDF.</td> <td rowspan="2" style="text-align: center;">11/29/16</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Update TCoPD to align with found conditions.</td> <td style="text-align: center;">5/26/17</td> <td style="text-align: center;">99</td> </tr> </tbody> </table> Recovery Action Assessment: CHPRC has realized cost and schedule impacts, resulting from this change in conditions. CHPRC has and continues to perform all actions that may mitigate impacts; however, CHPRC plans to capture any scope and cost changes resulting from the contamination discoveries prior to March 2017 in the TCoPD for the corresponding change proposal (CP 041 304 1600).	Risk recovery action(s)	Risk Date	FC Date	%	Send backfill stockpile to ERDF.	11/29/16	Complete	100	Update TCoPD to align with found conditions.	5/26/17	99
Risk recovery action(s)	Risk Date	FC Date	%												
Send backfill stockpile to ERDF.	11/29/16	Complete	100												
Update TCoPD to align with found conditions.		5/26/17	99												
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)															
No critical risks identified in the month of <i>May</i> .															
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)															
Lifecycle Risk Triggers (Risk could be realized at any point of the project)															
RCC-618-10-07: Contamination Event at 618-10 Waste Site	During fieldwork activities, a contamination event occurs that requires corrective actions, resulting in schedule and cost impacts. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$1,288K, 64 days	●	↔	Risk Trigger Metric: The risk could be triggered by high winds or operational upsets (i.e. spills or airborne release). <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 70%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 20%;">%</th> </tr> </thead> <tbody> <tr> <td>Enhanced radiological controls implemented on project.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Mitigation Assessment: No changes in the month of <i>May</i> . Much of the 618-10 work is performed in hazardous and radioactive environments. By its nature, the work can be dangerous. Although CHPRC procedures, safety programs, and training programs are designed to minimize the potential loss of control of hazardous/radioactive substances, such an occurrence could be deemed to be significant enough to warrant corrective actions outside of the baseline (i.e. a prolonged work shutdown).	Mitigation action(s)	FC Date	%	Enhanced radiological controls implemented on project.	Ongoing	N/A					
Mitigation action(s)	FC Date	%													
Enhanced radiological controls implemented on project.	Ongoing	N/A													

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
RL-0041/WBS-041									
RCC-618-10-09: Discovery of Unexpected Waste/Contamination Discovery of waste/contamination quantities above what is assumed, waste/contamination that is above and beyond COCs or waste profile, or waste/contamination is found in the assumed clean area of the design. Resulting in greater than planned RAD controls resulting in cost and schedule impacts. Risk Handling Strategy: Accept Probability: Very Low (<10%) Worst Case Impacts: \$1,280K, 64 days			Risk Trigger Metric: This risk has previously been realized as more drums than planned were discovered. This risk has the potential to occur again during mass excavation if additional waste/contamination is discovered.						
			<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Closely managing waste inventories and discoveries, and making adjustments as required.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A
			Mitigation action(s)	FC Date	%				
Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A							
Mitigation Assessment: No changes in the month of May . The estimate for the remediation of the 618-10 Waste Site included an assumed amount of additional drums still to be remediated. The project identified unexpected additional drums that were not planned or estimated. The project will continue to closely monitor and manage waste inventories and any new discoveries.									
Unassigned Risks (Pending ownership of identified threats/opportunities)									
No unassigned risks identified in the month of May .									

CRITICAL PATH SCHEDULE

The critical path flows through 618-10 Burial Ground closeout sampling and analysis to support preparing calculations for backfill concurrence. Following receipt of backfill concurrence from RL/EPA, the project will begin backfill fieldwork activities. After successful completion of backfill, the project will finish infrastructure demobilization.

SCHEDULE MARGIN/MANAGEMENT RESERVE

Reference Appendix C.4 Formats 1, 2, 3, and 5 for specific schedule margin/MR utilization for this CAP.

CRITICAL DECISION MILESTONE STATUS

Number	Title	Due Date	Forecast Date	Status/ Comment
KPP #1	Complete the 618-10 Burial Ground Remediation	1/31/2020	6/27/18	
KPP #2	Complete the Remediation of the 316-4 and 600-63 Waste Sites	1/31/2020	3/13/18	
	CD-4 Closeout	1/31/2020	TBD	CD-4 closeout pending contract definitization.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

DOE ACTIONS / DECISIONS



Description	CHPRC Delivery Date	RL Due Date
RL and Regulator Review of Closeout Sampling Instructions for 600-63 Waste Site	4/27/17 (A)	5/1/17 (A)
RL and Regulator Review of Closeout Sampling Instructions for 316-4 Waste Site	5/18/17 (A)	7/5/17
RL and Regulator Review of Closeout Sampling Instructions for 618-10 Burial Ground	7/19/17	9/1/17
RL/EPA Review & Approve Backfill Concurrence for 316-4 Waste Site	9/21/17	9/28/17
RL and Regulator Review of CVP and Waste Site Reclassification Form for 316-4 Waste Site	10/17/17	11/30/17
RL/EPA Review & Approve Backfill Concurrence for 600-63 Waste Site	11/16/17	11/29/17
RL and Regulator Review of CVP and Waste Site Reclassification Form for 600-63 Waste Site	11/16/17	12/30/17
RL/EPA Review & Approve Backfill Concurrence for 618-10 Burial Ground	1/23/18	1/30/18
RL and Regulator Review of CVP and Waste Site Reclassification Form for 618-10 Burial Ground	3/14/18	4/27/18

Appendix C.4

RL-0041_C1 – Project 618-10, 316-4 and 600-63 Waste Sites

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



May 2017
CHPRC-2017-05, 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 PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr				a. NAME PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr				a. FROM (YYYYMMDD) 2017 / 04 / 24							
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18				b. TO (YYYYMMDD) 2017 / 05 / 21							
c. TYPE CPAF		d. SHARE RATIO															
5. CONTRACT DATA																	
a. QUANTITY 1	b. NEGOTIATED COST 0	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 70,486	d. TARGET PROFIT/FEE 0	e. TARGET PRICE 0	f. ESTIMATED PRICE 61,611	g. CONTRACT CEILING 70,486	h. ESTIMATED CONTRACT CEILING 61,611	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) Dickerson, Kala K			b. TITLE Prime Contract Compliance Manager									
a. BEST CASE		61,611			c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)									
b. WORST CASE		61,813															
c. MOST LIKELY		61,611	70,486	8,875													
8. PERFORMANCE DATA																	
CAPN.PBS Control Account.PARS 2 WBS (3)		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-0041 Nuc Fac D&D - RC Closure Proj																	
RL_0041_C1.05.02 618-10 Burial Ground		3,440	3,143	1,714	-297	1,429	32,375	32,277	24,789	-98	7,488	0	0	0	57,427	51,567	5,860
RL_0041_C1.05.03 316-4 Waste Site		1,247	1,627	302	380	1,326	5,421	5,516	3,001	94	2,515	0	0	0	11,434	8,822	2,612
RL_0041_C1.05.04 600-63 Waste Site		0	9	15	9	-6	0	118	83	118	34	0	0	0	1,624	1,222	402
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		4,687	4,779	2,031	92	2,748	37,797	37,911	27,873	114	10,037	0	0	0	70,486	61,611	8,875
f. MANAGEMENT RESERVE															0		
g. TOTAL		4,687	4,779	2,031	92	2,748	37,797	37,911	27,873	114	10,037	0	0	0	70,486		
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																	
a. VARIANCE ADJUSTMENT																	
b. TOTAL CONTRACT VARIANCE																	
										114	10,037			70,486	61,611	8,875	

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 PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr		a. NAME PARS II - RL-0041.C1 Base Funded Nuc Fact D&D River Corr		a. FROM (YYYYMMDD) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 05 / 21	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

WBS FOC Control Account.PARS 2 WBS (3) 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)						
041.6 - 618 10 Projects																
RL_0041_C1.05.02 618-10 Burial Ground	3,440	3,143	1,714	-297	1,429	32,375	32,277	24,789	-98	7,488	0	0	0	57,427	51,567	5,860
RL_0041_C1.05.03 316-4 Waste Site	1,247	1,627	302	380	1,326	5,421	5,516	3,001	94	2,515	0	0	0	11,434	8,822	2,612
RL_0041_C1.05.04 600-63 Waste Site	0	9	15	9	-6	0	118	83	118	34	0	0	0	1,624	1,222	402
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)	4,687	4,779	2,031	92	2,748	37,797	37,911	27,873	114	10,037	0	0	0	70,486	61,611	8,875
f. MANAGEMENT RESERVE														0		
g. TOTAL	4,687	4,779	2,031	92	2,748	37,797	37,911	27,873	114	10,037	0	0	0	70,486		

CONTRACT PERFORMANCE REPORT													Form Approved OMB No. 0704-0188			
FORMAT 3 - BASELINE										DOLLARS IN THOUSANDS						
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:				3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009			4. REPORT PERIOD a. FROM: 2017/04/24 b. TO: 2017/05/21						
5. CONTRACT DATA																
a. ORIGINAL NEGOTIATED COST 0			b. NEGOTIATED CONTRACT CHANGE \$0		c. CURRENT NEGOTIATED COST (A + B) \$0		d. ESTIMATED COST AUTH UNPRICED WORK 70,486		e. CONTRACT BUDGET BASE (C + D) \$70,486		f. TOTAL ALLOCATED BUDGET \$70,486		g. DIFFERENCE (E - F) \$0			
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2018		k. CONT COMPLETION DATE 9/30/2018			l. EST COMPLETION DATE 9/30/2018						
6. PERFORMANCE DATA																
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)						UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)
			+1 Jun-17 (4)	+2 Jul-17 (5)	+3 Aug-17 (6)	+4 Sep-17 (7)	+5 Oct-17 (8)	+6 Nov-17 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)		
a. PM BASELINE (BEGIN OF PERIOD)	33,110	4,687	4,588	3,205	2,881	4,182	1,457	1,742	0	0	0	3,497	49,156	17,833	0	70,486
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																
RL_0041_C1.05.02 618-10 Burial Ground																
None at this time.													0	0	0	0
RL_0041_C1.05.03 316-4 Waste Site																
None at this time.													0	0	0	0
RL_0041_C1.05.04 600-63 Waste Site																
None at this time.													0	0	0	0
c. PM BASELINE (END OF PERIOD)	37,797	4,687	4,798	3,368	2,881	4,597	2,037	2,665	0	0	0	3,497	49,156	17,833	0	70,486

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 PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr		a. NAME PARS II - RL-0041.C1 Base Funded Nuc Fact D&D River Corr		a. FROM (YYYYMMDD) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 05 / 21	
		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.FOC Control Account.PARS 2 WBS (3) 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 JUN 2017 (4)	+2 JULY 2017 (5)	+3 AUG 2017 (6)	+4 SEPT 2017 (7)	+5 OCT 2017 (8)	+6 NOV 2017 (9)	1st Qtr FY18 (10)	FY18 (11)	FY19-LC (12)	ATCOMPLETE (13)		
041.6 - 618 10 Projects														
RL_0041_C1.05.02 618-10 Burial Ground	69	758	65	68	63	60	40	33	32	306	0	0	0	1426
RL_0041_C1.05.03 316-4 Waste Site	11	54	14	8	8	8	8	13	13	29	0	0	0	160
RL_0041_C1.05.04 600-63 Waste Site	0	3	4	7	7	6	3	3	3	3	0	0	0	39
g. TOTAL DIRECT	80	816	82	83	77	75	56	49	49	339	0	0	0	1625

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 041 - RL-41 Nuclear Facility D&D - River Corridor				a. FROM (YYYYMMDD) 2017 / 04 / 24	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE				b. TO (YYYYMMDD) 2017 / 05 / 21	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE No X Yes (YYYYMMDI 2009 / 09 / 18)					
5. Evaluation									
Direct Projects									
	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	4,686.7	4,778.9	2,030.8	92.1	2.0%	2,748.1	57.5%	1.02	2.35
Cumulative:	37,796.7	37,910.6	27,873.3	114.0	0.3%	10,037.3	26.5%	1.00	1.36
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	70,485.7	61,611.0	8,874.7	12.6%	0.76	0.97			
Explanation of Variance/Description of Problem:									
CURRENT MONTH The current month schedule variance is within reporting thresholds. The current month favorable cost variance is partially due to the 618-10 Burial Ground project management and support accounts that experienced significant underruns due to efficient use of resource sharing across the complex and reduced material usage. Additionally, excavation efficiencies at the 316-4 Waste Site reduced the total volume of soil to be removed, which resulted in significant progress with minimal costs.									
CONTRACT TO DATE The cumulative schedule variance is within threshold. The cumulative favorable cost variance is partially due to the sharing of resources and materials among the projects, which has resulted in fewer purchased materials and lower labor costs. Attrition has led to a reduction in staffing and in cost with work still being completed on time with the resources left. Additionally, excavation efficiencies at the 316-4 Waste Site reduced the total volume of soil to be removed, which resulted in significant progress with minimal cost.									
VARIANCE AT COMPLETION The favorable variance at completion reflects the efficient practice of sharing resources and materials amongst the 618-10 Complex projects. Additionally, the processing costs of the drums from the 618-10 Burial ground are anticipated to be less than what had been planned. Attrition has also led to a reduction in staffing and in cost with work still being completed on time with the resources left, and excavation efficiencies at the 316-4 Waste Site reduced the total cost to complete excavation.									
IMPACTS There are no current impacts to the project schedule or cost.									
Corrective Action:									
Corrective Action: There are no corrective actions required at this time.									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):									
1. Schedule Margin Analysis: N/A, pending definitization of the scope. 2. IMS Data dictionary Changes: None in the month of May. 3. Forecast Schedule with No Baseline: None in the month of May. 4. UB Balance: N/A 5. Negative ACWP: N/A 6. EAC Analysis: Best Case: \$61,611; Most Likely: \$61,611; Worst Case: \$61,813 7. Negative CV > VAC: N/A 8. MR Transactions: None in the month of May. 9. Freeze Period Changes: None in the month of May. 10. Retroactive Changes: None in the month of May. 11. EVT Changes: None in the month of May.									
*During the Month of April CHPRC kicked off the FY2018 comprehensive EAC process (ZZCSMILE1117A, Kickoff FY18 Annual Comprehensive EAC), and is expected to finish mid-September (ZZCSMILE1117B, Submit Final FY18 Annual Comprehensive EAC).									