

Hanford Mission Integration Solutions



Monthly Contract Performance Report May 2021

R. E. Wilkinson
President & General Manager

U.S. Department of Energy
Contract No. 89303320DEM000031



LEGAL DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

This report has been reproduced from the best available copy.

Printed in the United States of America

Monthly Contract & Project Performance Report May 2021

Document Type: RPT

Date Published
June 2021

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

Contractor for the U.S. Department of Energy
under Contract 89303320DEM000031



P.O. Box 943
Richland, Washington 99352

APPROVED

By Janis Aardal at 12:24 pm, Jun 28, 2021

Release Approval

Date

Approved for Public Release;
Further Dissemination Unlimited

This page intentionally left blank.

Contents

1.0	EXECUTIVE SUMMARY	1
2.0	KEY ACCOMPLISHMENTS	1
3.0	MAJOR ISSUES.....	3
4.0	HMIS SAFETY PERFORMANCE.....	3
5.0	EARNED VALUE MANAGEMENT.....	6
6.0	FUNDS ANALYSIS.....	8
7.0	PERTINENT BUSINESS INFORMATION.....	11
8.0	BASELINE CHANGE REQUESTS	12
8.1	Undistributed Budget Activity	12
8.2	Management Reserve Activity	13
9.0	RISK MANAGEMENT.....	13
10.0	PROGRAM CONDITION STATUS	13
11.0	GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)	20
12.0	DOE ACTIONS/DECISIONS	20
	Section A.....	21
1.0	PROGRAM SERVICES AND SUPPORT SUMMARY	22
2.0	MAJOR ISSUES.....	53
3.0	PROGRAM RISK ASSESSMENT	53
3.1	HMIS I&SS Mission Key Risks	53
3.2	HMIS I&IS Mission Key Risks	57
3.3	HMIS MA Mission Key Risks	59
3.4	HMIS SES Mission Key Risks	60
3.5	HMIS IMS Mission Key Risks	62
3.6	HMIS ET&P Mission Key Risks	67
4.0	DOE ACTIONS/DECISIONS	68
	Section B.....	69
1.0	RELIABILITY PROJECTS EXECUTIVE SUMMARY	70
2.0	SAFETY PERFORMANCE.....	70
3.0	KEY ACCOMPLISHMENTS	70
4.0	EARNED VALUE MANAGEMENT.....	72
5.0	PROJECT RISK ASSESSMENT	74

5.1	HMIS L-612 Project Key Risks	74
5.2	HMIS L-789 Project Key Risks	75
5.3	HMIS L-839 Project Key Risks	76
5.4	HMIS L-850 Project Key Risks	78
5.5	HMIS L-888 Project Key Risks	81
5.6	HMIS L-895 Project Key Risks	83
5.7	HMIS L-897 Project Key Risks	85
5.8	HMIS L-934 Project Key Risks	88
6.0	BASELINE CHANGE REQUESTS	90
7.0	FUNDS ANALYSIS.....	91
8.0	MAJOR ISSUES.....	92
9.0	DOE ACTIONS/DECISIONS	93
10.0	GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)	93
11.0	RELIABILITY PROJECTS	93
	Appendix A.....	94
1.0	FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE	95
2.0	FORMAT 3, DD FORM 2734/3, BASELINE	96
3.0	FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM ANALYSIS.....	97
	Appendix B	104
1.0	FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE	105
2.0	FORMAT 3, DD FORM 2734/3, BASELINE	106
3.0	FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM ANALYSIS...	107

1.0 EXECUTIVE SUMMARY

Hanford Mission Integration Solutions (HMIS) continued to provide direct support to the U.S. Department of Energy (DOE) and its contractors with cost-effective infrastructure and Site services that are integral and necessary to accomplish the environmental cleanup mission through open and proactive communication, collaboration, and cooperation between Hanford Site customers (DOE Offices and Other Hanford Contractors [OHC]). Unless otherwise noted, all data provided is through May 23, 2021.

With changes to guidance from the Centers for Disease Control and Prevention (CDC), as well as the previously issued Executive Order, HMIS oversaw the process to begin updating sitewide the Coronavirus Disease of 2019 (COVID-19) safety protocols. While adhering to our existing COVID-19 protocols, HMIS staff planned and executed the FY 2021 Hanford Site Annual Field Site Exercise, which was not held in FY 2020 due to COVID-19 concerns and reduced operations. The exercise tested and validated the effectiveness of the Hanford Emergency Response Organization and included participation by several HMIS teams, the Hanford Emergency Operations Center, DOE, other Hanford contractors, Lourdes Medical Center and local states and counties.

As part of our ongoing commitment to increasing communication on ethics and compliance, we hosted a virtual meeting for all HMIS managers and supervisors featuring DOE's Office of Inspector General sharing critical fraud awareness training. We also continued development, testing and review of analytics for Code of Account usage, with an anticipated release in June.

May also saw several opportunities for HMIS to continue our role as site integrator. We supported implementation of DevonWay integrated Contractor Assurance System iCAS for Central Plateau Cleanup Company (CPCCo), so that all prime contractors and DOE are now able to use this system to increase efficiency and consistency of oversight activities. Another highlight was Crane & Rigging support for Washington River Protection Solutions (WRPS) at the Effluent Treatment Facility, requiring a significant scaffold assembly and utilizing three cranes during the work evolution to assist in a rotor replacement. Work by Fire Systems Maintenance allowed for closure of 33 fire system discrepancies, many of which presented potential safety hazards in the event of a fire. To promote increased vaccination across the Site, our team supported video production for a sitewide video featuring employees from each contractor sharing "Why I Got Vaccinated." Additionally, HMIS hosted a One Hanford Integrated Engineering Forum, with participants from the three prime contractors.

2.0 KEY ACCOMPLISHMENTS

- Submitted two Performance Incentives on May 27th, 2021, ahead of the scheduled FY2021 PEMP target dates. The remaining Hanford Life-Cycle Cleanup Baseline (HLCCB) gap analysis recommended resolutions and Final Integrated Site Planning Framework were completed and submitted to DOE.
- During May 2021, two invoices were submitted to DOE Richland Operations Office (DOE-RL) totaling \$32.5M for the work scope directly funded by DOE-RL, and 420 invoices were

submitted to the Other Hanford Contractors totaling \$11.2M. Business Process Compliance & Invoicing also responded to comments from RL on invoice HM20210701, with payment anticipated in mid-June. Preparations are also in progress for submitting the next invoice to DOE-RL on June 10.

- Hosted an “All Leaders” meeting where the DOE Office of Inspector General (DOE-OIG) presented Fraud Awareness training to participants. The OIG introduced themselves and explained the different roles they have at Hanford (investigations, audits, inspections and special projects), then gave an informative briefing with recent OIG fraud cases and the associated outcome so our management team can be aware of how fraud occurs and signs to look for as a manager.
- Buyer's Technical Representative (BTR) Responsible Manager Training (CBT AMBT04) has been finalized. Training will be available June 2021
- HMIS created a tracking tool that will assist DOE Hanford Advisory Board (DOE-HAB) staff in forecasting actions and anticipated deadlines. The tracking tool will be useful for time management and delineating ownership for assignments.
- Electrical Utilities (EU) worked in conjunction with the Volpentest Hazardous Materials Management and Emergency Response Federal Training Center (HAMMER) to provide a portable generator for DOE-0336 (Lockout Tagout) training. It will be used as a prop to assist in creating Tagout Authorization Forms (TAF) and will be instrumental in training workers on the unique Lockout Tagout issues involving generators. This is excellent exposure for the students as site cleanup activities are requiring more generators.



Portable Generator for Lockout Tagout Training

- HMIS Interface Management and HMIS Crane and Rigging supported WRPS the week of May 16, 2021 by reviewing and approving WRPS's request to update Service Delivery Document (SDD), SDD-35, *Crane and Rigging*, to reflect WRPS's newly implemented program to monitor all tank equipment lift that occur within a 300-ft. radius of WRPS's Tank-Side Cesium Removal (TSCR) Project.

- Began working with CPCCo Property Management on creating/combining process forms where practical for Multi-Contractors use. Current Property Management Forms in consideration include the Inter-Contractor Transfer Order (ICTO), Loss/Damage/Destruction Report (LDDR) and the Plant and Equipment Transfer (PET).
- Per a request from DOE, HMIS reviewed archaeological collections inventories to identify collections that are held by both DOE and the USACE. HMIS identified two archaeological sites from which materials have been collected and curated by both DOE and USACE. DOE will use this information to discuss with U.S. Army Corps of Engineers (USACE) and area Tribes the future storage of these items, with the possibility of consolidating items from the two sites at one repository.

3.0 MAJOR ISSUES

Program Services and Support: Refer to Section A of this report for Program Services and Support specific major issues.

Reliability Projects: Refer to Section B of this report for project-specific major issues.

4.0 HMIS SAFETY PERFORMANCE

HMIS continues to focus on integrating and implementing safety programs in all program and project areas. In May, we experienced two Recordable Injuries, one of which resulted in Days Away, and there were five first aids. HMIS continues to exceed DOE's targets for both Total Recordable Case (TRC) rate and Days Away, Restricted, or Transferred (DART) case rate. DOE's TRC target rate is set at 1.1 and the DOE target rate for DART is 0.6. To date, HMIS' rates are 0.74 and 0.55, respectively.

HMIS communicates frequently with our team through weekly Safety Starts and periodic safety bulletins. In May, weekly Safety Starts included: Electrical Safety, Motorcycle Safety, Low Tech Phishing, National Swim Safety Month and National Health Vision Month. With the changing season, HMIS has also been communicating to the work teams the importance of maintaining hydration to avoid heat stress related injuries

HMIS continually reviews our first aid cases and analyzes the leading indicator to ensure our focus on injury prevention is targeted to events and activities that lead to first aid injuries. This information is shared at President's Zero Accident Council and further disseminated through the HMIS Employee Zero Accident Council Structure to ensure employees are informed and aware of the types of injuries and incidents occurring across the company. In addition, injury and vehicle accident statistics are tracked for each work group allowing individual work groups to focus on issues related to their specific events for Lessons Learned opportunities.

During May, HMIS Health and Safety integrated the implementation of revised COVID-19 safety protocols across the Hanford Site. Working with all the other site prime contractors, HMIS led the effort to implement new CDC guidelines for fully vaccinated personnel. The changes in safety protocols also incorporated direction from Executive Order 13991, Protecting the Federal Workforce and Requiring Mask-Wearing, which tightened protocols in some areas. This involved revising procedures and management directives, developing a standard training

package for our supervisors and managers, developing frequently asked questions, developing site-wide and contractor-specific communications and a new Hanford App to support personnel attesting to being vaccinated. We anticipate the new guidance to be implemented in June.

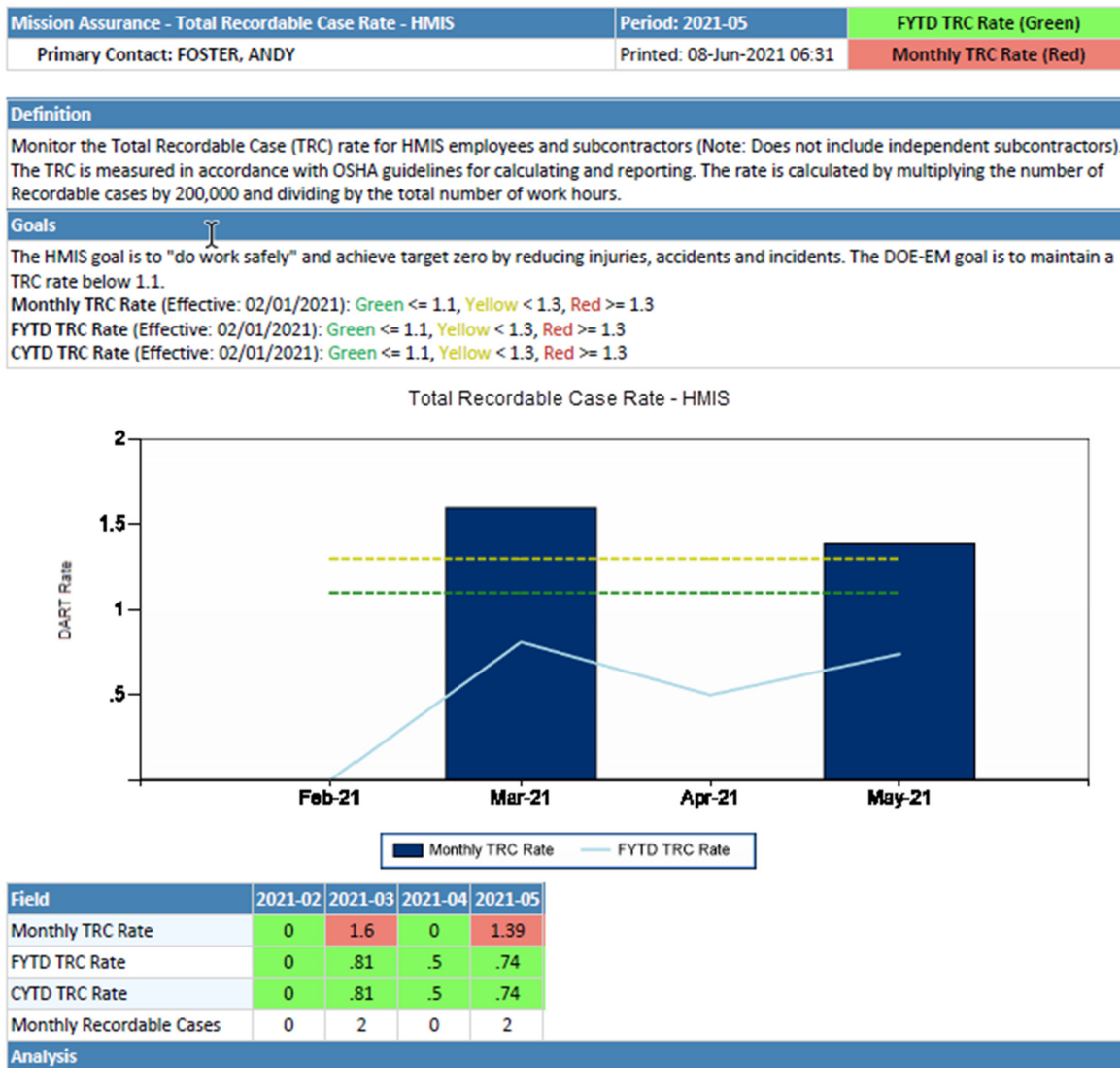


Figure 1. Total Recordable Case Rate (TRC)

Monitor the TRC rate for HMIS employees and subcontractors (Note: Does not include independent subcontractors). The TRC is measured in accordance with Occupational Safety and Health Administration (OSHA) guidelines for calculating and reporting. The rate is calculated by multiplying the number of Recordable cases by 200,000 and dividing by the total number of work hours.

EXECUTIVE SUMMARY

Mission Assurance - Days Away, Restricted or Transferred Case Rate - HMIS	Period: 2021-05	Fiscal Year DART Rate (Green)
Primary Contact: FOSTER, ANDY	Printed: 08-Jun-2021 06:22	Monthly DART Rate (Yellow)

Definition
Monitor the days away, restricted or transferred (DART) case rate for HMIS employees and subcontractors. The DART rate is measured in accordance with OSHA guidelines for calculating and reporting. The rate is calculated by multiplying the number of DART cases by 200,000 and dividing by the total number of work hours.
Goals
The HMIS goal is to "do work safely" and achieve target zero by reducing injuries, accidents and incidents. The DOE-EM performance baseline goal is to maintain a DART rate below 0.6.
Monthly DART Rate (Effective: 02/01/2021): Green <= 0.6, Yellow <= 0.75, Red > 0.75
Fiscal Year DART Rate (Effective: 02/01/2021): Green <= 0.6, Yellow <= 0.75, Red > 0.75
Calendar Year DART Rate (Effective: 02/01/2021): Green <= 0.6, Yellow <= 0.75, Red > 0.75

Days Away, Restricted or Transferred Case Rate - HMIS

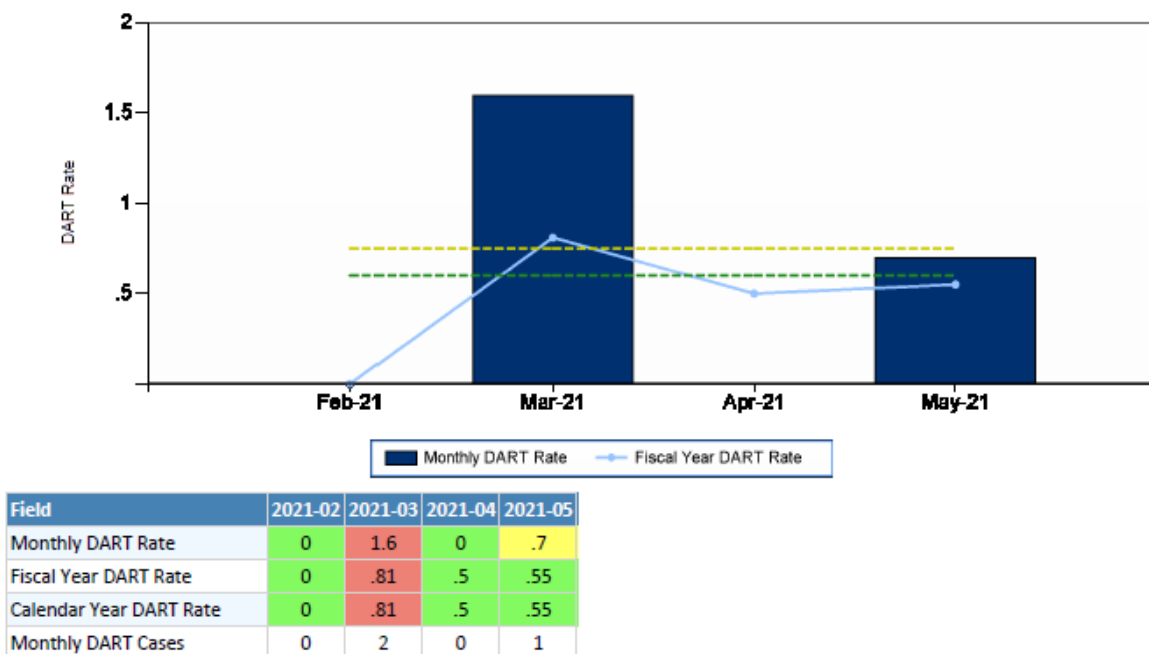


Figure 2. Days Away, Restricted, Transferred (DART)

Monitor the DART Case rate for HMIS employees and subcontractors (Note: Does not include independent subcontractors). The DART is measured in accordance with OSHA guidelines for calculating and reporting. The rate is calculated by multiplying the number of DART cases by 200,000 and dividing by the total number of work hours.

5.0 EARNED VALUE MANAGEMENT

Table 1. HMIS Schedule and Cost Performance

	CURRENT PERIOD (CP)					CUMULATIVE TO DATE (CTD)					AT COMPLETION		
	BUDGETED COST		ACTUAL COST	VARIANCE		BUDGETED COST		ACTUAL COST	VARIANCE		BAC	EAC	VARIANCE
CLIN Data for May	BCWS	BCWP	ACWP	SCHEDULE	COST	BCWS	BCWP	ACWP	SCHEDULE	COST			
0001 - Contract Transition	\$0	\$0	\$44	\$0	(\$44)	\$6,405	\$6,405	\$5,684	\$0	\$721	\$6,405	\$5,684	\$721
0003 - Legacy Benefit Plans & Legacy Workers' Comp	\$3,444	\$3,444	\$2,490	\$0	\$954	\$14,429	\$14,429	\$8,500	\$0	\$5,929	\$448,037	\$439,025	\$9,013
0004 - Infrastructure & Site Services	\$27,898	\$27,655	\$24,933	(\$243)	\$2,722	\$113,255	\$108,073	\$104,085	(\$5,182)	\$3,989	\$2,597,047	\$2,612,463	(\$15,416)
0005 - DOE Small Business Procure Pre-Award Support	\$19	\$19	\$42	\$0	(\$23)	\$62	\$62	\$42	\$0	\$21	\$2,419	\$2,390	\$28
0007 - Infrastructure Reliability Projects	\$988	\$614	\$962	(\$374)	(\$348)	\$5,309	\$5,015	\$5,541	(\$294)	(\$525)	\$361,125	\$361,265	(\$140)
0008 - DOE Small Biz Pro Post-Award Supp & Other DDW	\$461	\$461	\$379	\$0	\$82	\$1,954	\$1,954	\$1,471	\$0	\$483	\$210,502	\$211,184	(\$682)
Undistributed Budget (UB)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$215,335	\$215,335	\$0
Management Reserve (MR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grand Total	\$32,810	\$32,193	\$28,851	(\$616)	\$3,343	\$141,414	\$135,939	\$125,323	(\$5,475)	\$10,617	\$3,840,869	\$3,847,345	(\$6,476)

Note: \$ in Thousands

Performance Summary

The HMIS contract went operational on January 25, 2021.

Cost Variance (CV) Analysis: The Current Month (CM) favorable CV of \$3,343K is primarily due to:

(+\$954K) 4001.03.01 - Legacy Benefit Plans - The favorable CM CV is primarily due to an incorrect P-Card entry, invoicing during the contract startup, and transitioning of plans from prior entity.

(+\$426K) 4001.04.01 - Utilities & Infrastructure – The favorable CM CV is primarily due road patching, paving and road service budgets were level-loaded but most of the work occurs during summer months.

(-\$611K) 4001.04.03 - Safeguards & Security – The unfavorable variance is primarily due to labor overruns driven by the exclusion of non-standard shifts in the budget for Security Police Officers (SPO). Other variances include subcontract spending on the development of Personnel Security software applications for Security Personal Identity Verification (PIV) and Reliability Program records tracking; bulk records declassification to reduce the quantity of classified holdings onsite; and administrative, project management, and Information Technology (IT) support.

(+\$358K) 4001.04.04 - Emergencies & First Responders – The favorable variance is primarily due non-cash credits received for fire and emergency support services provided to Energy Northwest. To date, value for the Hanford Fire Department (HFD) provided service has not been implemented into the contract baseline. Other variances include reductions in IT costs for transfer of scope to North Wind and offsetting labor and subcontract deltas.

(+\$954K) 4001.04.06 - Information Technology & Mgmt. – The favorable CM CV is primarily due to underruns experienced from planned NorthWind costs. NorthWind management charge to various indirect accounts across Information Management causing underruns on the direct scope. Other variances include a delay in hiring for Material Difference FTEs and the software license budget being level-loaded rather than time-phased for the correct period in which the invoice will be received.

(+\$413K) 4001.04.07 - Business Services – The favorable CM CV is due to General Supplies Inventory (GSI) buys and sells resulting in a positive variance when material sales are greater than the current buys. This favorable variance is partially offset by Personal Property & Material Mgmt. Program higher than planned staffing levels.

(+\$581K) 4001.04.10 - Environmental Integration - The favorable Contract to Date (CTD) CV is primarily in labor due to staff supporting work for others, Reliability Projects, and staff absences.

Schedule Variance (SV) Analysis: The CM unfavorable SV of (\$616K) is primarily due to:

(+\$851K) 4001.04.12 - General Performance Requirements – The favorable CM SV is due to receiving EC & EF Equipment in the current month that was planned to be received in a prior month.

(-\$580K) 4001.07.03 - Installation Restoration Program (IRP) - Electrical System - L-801, Upgrade Supervisory control and data acquisition system (SCADA) performance measurement baseline (PMB) was changed via a Baseline Change Request (BCR) to reflect the proposed Firm-fixed Price milestone payment schedule of values as submitted in RPTO-007. The BCR required a point adjustment during the current period. **(-\$476K)**

(-\$344K) 4001.07.06 - IRP - Network & Telecom System - L-934, Office Space Gap Reduction – CM unfavorable SV is due to the realization of Budgeted Cost of Work Scheduled (BCWS) in the current period for construction scope that was completed in a prior period ahead of schedule.

(-\$527K) 4001.07.06 - IRP - Network & Telecom System - L-937, Gabe East Footprint Reduction (Phase 1) Engineering Change Request (ECR) driving schedule impacts to Restart Steering Committee (RSC) and Solar Array procurement and construction activities. ECR forecasted to complete in June.

Variance at Completion (VAC): The unfavorable VAC is primarily due to:

(+\$9,013K) 4001.03.01 - Legacy Benefit Plans - The favorable VAC is primarily due to Fernald, Mound, and Rocky Flat legacy benefits claims costs projected to be lower than the budgeted.

(-\$8,125K) 4001.04.03 – Safeguards & Security - The unfavorable VAC is primarily due to Non-Standard Shift Schedules for Patrol & Fire personnel not being bid in the proposal thus creating an overrun at completion.

(-\$3,492K) 4001.04.08 – Real Property Asset Management - The unfavorable VAC is primarily due to the budget baseline diverging from funding targets for FY21 associated with Conduct of Maintenance, Fire Systems Maintenance, and Work Management. The additional cost for this scope is creating an overrun at completion.

(-\$5,232K) 4001.07.04 – IRP Roads & Grounds - The unfavorable VAC is primarily due construction scope being removed from Performance Measurement Baseline (PMB) via BCR, however spend forecast was still maintained in cost system.

6.0 FUNDS ANALYSIS

Table 2. HMIS Fiscal Year 2021 Funds vs. Fiscal Year Spend Plan

FY 2021 IIP Funding Status Status through May FY 2021 (\$000)												
CLIN	Fund Source	IIP FYTD	FYTD ACWP	Spending Variance	* Funds Received	Remaining Available Funds	** RL Expected Funding	Total EAC	HMIS Uncosted Balance	Encumb Carryover	Hold Backs	Unencum Balance
CLIN 4	SWS and RL-0201 Fee	71,147.2	67,564.3	3,582.9	109,710.0	42,145.7	163,929.4	155,394.6	8,534.8	1,513.4	6,406.5	614.9
CLIN 4	RL-0020 (SES, IM, Fee)	29,006.0	27,325.1	1,680.9	50,332.0	23,006.9	71,220.7	59,160.1	12,060.6	745.4	11,224.5	90.7
CLIN 4	RL-0020 (RP)	240.2	118.8	121.4	523.5	404.7	2,034.0	509.5	1,524.5	1,615.2		(90.7)
CLIN 4	RL-0201 (RP)	8,237.8	6,693.7	1,544.1	28,458.0	21,764.3	42,572.7	18,023.4	24,549.3	6,845.3	17,704.0	-
CLIN 4	RL-0201 (HAMMER)	3,988.1	2,712.4	1,275.7	6,500.0	3,787.6	8,664.7	7,722.6	942.1	942.1		0.0
CLIN 4	RL-0201 (COVID, GSI, CSI)	689.4	499.4	190.0	2,930.0	2,430.6	3,243.2	2,371.3	871.9	871.9		(0.0)
CLIN 4	RL201, RL20, ORP-14, 60, PD - Other Se	1,621.3	1,008.3	613.0	6,587.2	5,578.9	4,484.8	3,252.4	1,232.4	246.1	986.3	-
CLIN 5	RL-0201 (Small Business, Fee)	22.1	44.8	(22.7)	95.5	50.7	150.0	126.9	23.1	1.5	21.6	-
CLIN 6	RL-0201 (Fee)	1,914.5	1,777.6	136.9	3,100.0	1,322.4	3,829.0	3,555.1	273.9	888.8		(614.9)
CLIN 7	RL-0020 (RP)	281.2	363.4	(82.2)	402.5	39.1	491.3	479.8	11.5		11.5	-
CLIN 7	RL-0201 (RP, Fee)	5,626.5	5,176.9	449.6	8,528.8	3,351.9	24,135.5	15,560.3	8,575.2	7,556.7	1,018.6	(0.1)
				-		-			-			-
	TOTAL	122,774.3	113,284.7	9,489.6	217,167.5	103,882.8	324,755.3	266,156.0	58,599.3	21,226.4	37,373.0	(0.1)

* Funds received through Contract Mod P00071 dated June 10, 2021

** RL Expected Funding thru CBAG Rev 2 - Pending approval of Integrated Investment Portfolio. Includes (\$14.5M) reductions to be identified in CBAG Rev 3. These reductions have been accounted for in the RL Expected Funding, Outlook and Hold Backs.

The Remaining Available Funds will fund SWS through July 27, 2021 and RL-0020 through August 31, 2021

Performance Summary

The current Integrated Investment Portfolio (IIP) was submitted to DOE-RL April 20, 2021 and based upon Contract/Baseline Alignment Guidance (CBAG) Rev 2. Since then there are potential reductions in process including: RL-0020 (\$4.2M), SWS (\$1.1M), RL-0201 Reliability Projects (RP) Site-wide Services (SWS) (\$9.2M) - Total (\$14.5M) - Awaiting firm DOE-RL guidance. These have been included in the RL Expected Funding, Outlook, Carryover, and Hold Backs.

Cost Variance Analysis:

The Fiscal Year to Date (FYTD) variance in SWS is primarily due to slow filling of open requisitions, variability of some of the scope newly subcontracted under HMIS, COVID-19

quarantines, and lower costs from NorthWind than expected. RL-0020 underruns are primarily in labor due to COVID-19 quarantines, attrition, and staff supporting other scope. In addition, timing of materials and equipment compared to the plan is causing an underrun. RL-0201 (HAMMER) is due to delay in procurements and projects that will carry over into FY22. RL-0201 [Reliability Project - Contract Line Item Number (CLIN) 4] is underrunning due to Project L-927, Gable East Footprint Reduction that has experienced delays with Engineering Change Notice and delay in the Solar Power System needs and requirements which in turn is delaying construction and procurement activities. The underrun in RL-0201 (Reliability Project - CLIN 7) is primarily due to the change in execution and payment structure of Project L-934, Mission Support Contract (MSC) Office Space Gap Reduction and Project L-801, Upgrade SCADA.

Variance at Completion:

The \$58.6M Variance at Completion is primarily due to \$15.2M in RL-0201 for L-612, 230kV Transmission System Reconditioning and Sustainability Repairs that is being held back pending DOE-RL direction and is funding specifically held for Project L-612. There is a requirement to maintain continuity of operations into FY22 for a Continuing Resolution (CR) which would be approximately \$13.5M of funding held back at a bottom line. RL-0020 has an uncosted balance of \$12.1M that will be held for FY22 and supports a CR. Reliability Projects are under by \$19.5M (excluding L-612 funding). SWS underrun is primarily due to labor for requisitions not being filled in a timely manner and material costs for Hanford Fire Department that are pending, depending on the fire season and a pump truck that has been deferred. These underruns in SWS will be held to fund the Business Management System (BMS), debit Passbacks, and a CR. Fee is being accrued at 80% and \$3.1M will be uncosted and held until a final fee determination is made in FY22.

Encumbered Carry scope is \$21.2M and will scope will complete in FY22 including Reliability Project \$16.0M, HAMMER \$.9M, General Supplies Inventory \$.9M, Other DOE Services for TAMP \$.2M and fee \$3.1M. The Direct Cost Adder (DCA) collects the cost of centralized management, support from others, craft indirect time, and non-labor cost such as training and facilities. These costs are distributed via a rate on direct labor. Usage-Based Services (UBS) are services liquidated to customers (internal and external). The UBS cost is associated with a service and distributed on a unit rate to the customer based upon requests ("pay by the drink").

Table 3. Usage-Based Services/Direct Cost Adder Summary (Dollars in Thousands)

Account Description	Fiscal Year To Date May FY21					FY21 HMIS Fiscal Year End			
	(Budget) Budgeted Cost of Work Scheduled (BCWS)	(Actuals) Actual Cost of Work Performed (ACWP)	Cost Variance	Liquidation	Liquidation (Over) / Under	Budget At Completion (BAC)	Outlook	Forecasted Liquidation	Forecasted Liquidation (Over) / Under
Direct Cost Adder (DCA)									
Software Services (4001.09.06.01.01)	2,653.7	851.0	1,802.7	(1,057.0)	(206.0)	5,525.9	1,802.6	(2,176.4)	(373.7)
Records Mgmt (4001.09.06.07.01)	599.5	590.5	9.0	(412.8)	177.7	1,248.3	1,138.6	(850.1)	288.5
Janitorial Services (4001.09.08.02.02)	604.5	638.4	(33.9)	(743.2)	(104.9)	1,258.8	1,379.7	(1,535.8)	(156.0)
Maintenance (4001.09.08.02.01)	2,439.8	3,573.5	(1,133.7)	(2,570.4)	1,003.1	5,080.4	7,194.4	(6,370.6)	823.8
Motor Carrier (4001.09.02.01.01)	1,794.0	1,735.4	58.6	(1,812.8)	(77.4)	3,735.8	3,987.4	(4,167.4)	(180.0)
Total Direct Cost Adder - Total	8,091.5	7,388.9	702.6	(6,596.2)	792.6	16,849.2	15,502.8	(15,100.2)	402.5
Usage Based Service									
Dosimetry (4001.09.10.08.01)	1,574.6	1,564.8	9.8	(1,665.1)	(100.3)	3,278.9	3,782.4	(3,967.0)	(184.6)
Training (4001.09.05.01.01)	4,249.6	5,912.9	(1,663.3)	(6,323.8)	(410.9)	8,849.1	12,317.5	(12,493.0)	(175.4)
Hanford Rad Instrumentation Prog (4001.09.10.08.02)	1,288.3	992.8	295.5	(1,120.6)	(127.7)	2,682.7	2,296.6	(2,796.8)	(500.2)
Information Technology Services (4001.09.06.03)	9,773.8	13,983.4	(4,209.6)	(11,485.1)	2,498.3	20,344.6	23,216.7	(23,236.7)	(20.0)
Work Management (4001.09.08.02.04.05)	126.0	223.9	(97.9)	(280.2)	(56.2)	262.3	481.9	(481.9)	0.0
Occupancy Lease (4001.09.08.02.03.04)	1,322.5	1,983.2	(660.7)	(1,655.0)	328.2	2,754.0	3,504.0	(3,234.6)	269.4
Occupancy Gov't (4001.09.08.02.03.05)	1,382.0	1,570.4	(188.4)	(1,813.9)	(243.5)	2,885.1	3,525.8	(3,666.6)	(140.9)
Crane & Rigging (4001.09.02.03.01)	3,401.5	3,852.1	(450.6)	(3,709.2)	142.9	7,083.1	8,375.1	(8,172.1)	203.0
Fleet Fuel Delivered (4001.09.02.02.03.04)	199.9	180.4	19.5	(201.0)	(20.6)	416.3	347.4	(405.2)	(57.7)
Fleet Fuel Consumed (4001.09.02.02.03.05)	1,099.5	767.7	331.8	(670.8)	96.9	2,289.6	1,827.8	(1,527.9)	299.9
Fleet Services (4001.09.02.02.01)	5,897.4	2,768.9	3,128.5	(2,416.0)	352.9	12,280.6	6,314.3	(6,684.2)	(369.9)
Fleet Materials (4001.09.02.02.02)	1,999.1	904.3	1,094.8	(494.4)	409.9	4,162.9	1,870.8	(1,769.2)	101.6
Fleet GSA Vehicle Maint (4001.09.02.02.04)	799.7	307.0	492.7	(476.6)	(169.7)	1,665.2	868.6	(953.8)	(85.2)
Courier Services (4001.09.07.05.01.01)	103.8	75.5	28.3	(74.5)	1.1	216.2	153.1	(153.1)	0.0
Usage Based Service - Total	33,217.7	35,087.5	(1,869.8)	(32,386.2)	2,701.2	69,170.6	68,882.1	(69,542.1)	(660.0)
Variable Services Total	41,309.2	42,476.3	(1,167.1)	(38,982.5)	3,493.9	86,019.8	84,384.9	(84,642.3)	(257.4)

Usage Based Service/Direct Cost Adder – The FYTD negative cost variance of (\$1.2M) is primarily driven per a cost overrun to date of the Information Technology Services UBS pool. The FYTD Information Technology cost overrun reflects the large dollar (approx. \$6M) one-time license procurement cost which posted in fiscal May. The budget of the account was somewhat level spread and did not reflect this large one-time cost spike, thus the resultant overrun and negative variance. This variance is likely to decrease over the balance of the year as cumulative costs and budget become more representative.

The \$3.5M under liquidation FYTD is also primarily a result of this IT Microsoft license procurement. The IT UBS rates recover the full fiscal year service cost over the entire performance period, thus the one-time large procurement cost increase of May greatly impacts the FYTD liquidation performance. The IT account is currently expected to largely balance by fiscal year end.

7.0 PERTINENT BUSINESS INFORMATION

Table 4. Small Business Statistics – May

Socio Economic Category	Goals from SBSP	FY21 Actual to Date (% and Award Amount)	Cumulative	On track to meet or exceed goals
Small Business (SB)	55%	91.27% (\$67,669,573.31)	91.27%	✓
Small Disadvantaged Business (SDB)	8%	51.90% (\$38,481,592.02)	51.90%	✓
Small Woman Owned Business (SWOB)	8%	13.49% (\$10,005,188.26)	13.49%	✓
HUBZone (HUB)	4%	10.35% (\$7,675,503.31)	10.35%	✓
Service Disabled Veteran Owned (SDVO)	4%	10.31% (\$7,645,794.95)	10.31%	✓
Veteran Owned Small Business (VOSB)	5%	13.57% (\$10,059,277.64)	13.57%	✓

Overall award total through reporting period (May 2021) for FY21: \$74,143,894.01

NOTES:

- FY21 Actual Data and Cumulative columns are the same since both reporting periods align.
- HMIS percentage goals are calculated based on the Total Awards divided by the Overall Awards Total. Each reporting value is calculated separately utilizing the same process and measured against the overall subcontracting goals as outlined in the HMIS Small Business Subcontracting plan.
- HMIS reports all purchase card, purchase orders and subcontract awards based on award values and established size standards associated with the subcontractor, i.e. small business, and large business. As a part of the reporting structure, HMIS additionally reports all socio-economic conditions (Small Disadvantage Business, Small Woman Owned Business, Hub Zone, Small Disabled Veteran Owned and Veteran Owned Small Business). HMIS credits all subcontract awards to a Government Contractor, Educational Institute, Nonprofits, Off-Contract, Government entities and Foreign under a Formally Excluded heading, which ultimately reports under the large business.

8.0 BASELINE CHANGE REQUESTS

In May, HMIS approved and implemented eight Baseline Change Requests (BCRs) into the Contractor Performance Baseline (CPB). The change requests are identified in the following table:

Table 5. May 2021 Baseline Change Requests

Change Request #	Title	CLIN	Summary of Change
BCR-HMS-21-021	HMIS Execution Strategy Internal Replan	4, N/A	This BCR replanned multiple HMIS FY 2021 work scopes to align to latest execution strategies and/or provide sufficient segregation of costs within the PMB.
BCR-HMS-21-022	Replan EHR Project H-002	4	This BCR updates H-002 to align with execution following DOE approval of HMIS alternative analysis.
BCR-HMS-21-023	Update Baseline Plan for New Business Compliance Organizations	N/A	This BCR documents Business Process Compliance and Invoice Reviews organization change.
BCR-HMS-21-024	Implement RFSs through Contract Mod P00066	4	This BCR distributes FY 2021 budget for RFSs through contract modification P00066.
BCR-HMS-21-025	CLIN 6 Budget Reallocation Update for HLMI	6	This BCR reallocates FY 2021 budget within CLIN 6 from WRPS to HLMI associated WBSs.
BCR-HMS-21-026	Align Reliability Projects to Proposal Submittals, Execution Strategy, and Construction Execution Change Orders	4, 7	This BCR replanned Reliability Projects to align with latest execution strategies, proposal submittals, and/or subcontractor design/construction schedules.
BCR-HMS-21-027	Implement Firm Fixed Price CLIN 7 Task Orders Invoicing Strategy	4, 7	This BCR incorporates HMIS firm-fixed price (FFP) proposal milestone-payment activities and budget in the PMB for task orders RPTO-005 and RPTO-007.
BCR-HMS-21-028	Update Program Log for Contract Modification P00066 and Update RP Out-Year Planning Package	4, 7	This BCR implements the program log entries to transfer the Negotiated Contract Cost (NCC) to UB through contract modification P00066.

8.1 Undistributed Budget Activity

In May, the largest contributor to the change in Undistributed Budget (UB) was BCR-HMS-21-027. This BCR incorporated HMIS firm-fixed price (FFP) proposal milestone-payment activities and budget in the PMB for task orders RPTO-005 and RPTO-007 which returned any indirect cost back to CLIN 4 UB and the milestone payments themselves do not earn General and Administrative (G&A).

**Table 6. May 2021 Undistributed Budget
(Dollars in Thousands)**

Change Request #	Title	CLIN	UB
BCR-HMS-21-024	Implement RFSs through Contract Mod P00066	4	(\$68)
BCR-HMS-21-026	Align Reliability Projects to Proposal Submittals, Execution Strategy and Construction Execution Change Orders	4	\$4
BCR-HMS-21-027	Implement Firm Fixed Price CLIN 7 Task Orders Invoicing Strategy	4	\$327

8.2 Management Reserve Activity

There was no change in Management Reserve (MR) in May.

9.0 RISK MANAGEMENT

Program Services and Support: Refer to Section A of this report for Program Services and Support specific risk assessments.

Reliability Projects: Refer to Section B of this report for project-specific risk assessments.

10.0 PROGRAM CONDITION STATUS

**Table 7. Hanford Site Infrastructure System Health and Status Summary
HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND
STATUS SUMMARY
DATA CURRENT THROUGH MAY 23, 2021**

INFRASTRUCTURE SYSTEM		SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS			
			OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION
WATER/SEWER	HMIS-ENG-66397, Rev 0 Export Water (INFRA-EW) Data: Jan - Mar 2021 Last Published: Apr 2021 Updated Quarterly	This system provides export water to the 200 East & West Areas of the Hanford Site. Columbia River water is pumped to the 100-B and 100-D Areas and placed in settling basins. This system interfaces with both the raw and sanitary water systems.	81% (-4%)	77% (-5%)	91% (-3%)	86% (+1%)
	HMIS-ENG-66396, Rev 0 Raw Water (INFRA-RW) Updated Quarterly	This system delivers raw water from the 200 Area reservoirs to the 200 Areas of the Hanford Site.	71% (-1%)	55% (NC)	92% (-8%)	97% (+1%)

HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY

DATA CURRENT THROUGH MAY 23, 2021

INFRASTRUCTURE SYSTEM		SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS			
			OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION
	Data: Jan - Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-66395, Rev 0 Updated Quarterly					
	Sanitary Water (INFRA-SW) Data: Jan - Mar 2021 Last Published: Apr 2021	This system treats export water for human use and consumption in the 200 Areas of the Hanford Site.	92% (NC)	92% (NC)	91% (-2%)	92% (+1%)
	HMIS-ENG-66394, Rev 0 Updated Quarterly					
SAS	Sanitary Sewer (INFRA-SNS) Data: Jan - Mar 2021 Last Published: Apr 2021	This system receives and processes waste water generated from occupied facilities in the 200 Areas of the Hanford Site.	87% (+1%)	79% (NC)	96% (+3%)	100% (NC)
	HMIS-ENG-66418, Rev 0 Updated Quarterly					
	Safeguards and Security (INFRA-SAS) Data: Jan - Mar 2021 Last Published: Apr 2021	This system provides access control & intrusion detection capabilities at the Hanford Site excluding the 200 Area Interim Storage Area. The boundary for each facility security system is defined by the power source.	99% (+1%)	100% (NC)	100% (+2%)	93% (+3%)

HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY

DATA CURRENT THROUGH MAY 23, 2021

INFRASTRUCTURE SYSTEM		SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS			
			OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION
ELECTRICAL UTILITIES	HMIS-ENG-66447, Rev 0 Updated Quarterly Transmission (INFRA-Transmission) Data: Jan - Mar 2021 Last Published: Apr 2021	This system provides electricity to the entire Hanford Site by powering three 230 kV substations and one 115kV substation that powers the 400 Area. Major components of the system include the power lines, structures, and foundations. The deactivated A7 substation is this system as it functions only to transmit power.	See Note 5 (-0.9%)	100% (NC)	96% (NC)	100% (NC)
	HMIS-ENG-66446, Rev 0 Updated Quarterly Distribution (INFRA-Distribution) (INFRA-T&D) Data: Jan - Mar 2021 Last Published: Apr 2021	This system provides power to the entire Hanford Site from the substations using overhead and some underground distribution lines. Major components of the system include service transformers, conductor, poles, line fault indicators, pole-top reclosers, capacitor banks and pole-top switches.	93.2% (-1.4%)	100% (+0.1%)	76.2% (-10%)	90% (+3.3%)
	HMIS-ENG-66401, Rev 0 Updated Quarterly Supervisory, Control, and Data Acquisition (INFRA-EU_SCADA) Data: Jan - Mar 2021 Last Published: Apr 2021	This system provides real-time knowledge of the electrical power flowing through the INFRA-TRANSMISSION, INFRA-SUB_A6, INFRA-SUB_A8, INFRA-SUB_A9, and INFRA-DISTRIBUTION systems. This system has some real-time knowledge of the INFRA-SUB_451B system. It performs remote operation of some switches.	88.10% (-1.59%) See Note 6	99.995% (+0.006%)	95.6% (-4.4%)	98.3% (NC)
	HMIS-ENG-66448, Rev 0 Updated Quarterly Electrical Utilities: Meter Data Management System (INFRA-MDMS) Data: Jan - Mar 2021 Last Published: Apr 2021	This system provides data collection, energy management, & access by stakeholders through a web-based Energy Management Module, and energy billing to support the unique Hanford electrical billing process for BPA billing, costing, forecast, and rate.	87.8% (-4.8%) See Note 6	98.4% (-0.1%)	96.0% (+0.6%)	99.3% (-0.7%)
	HMIS-ENG-66398, Rev 0 Updated Quarterly Substation A6 (INFRA-SUB_A6)	This 230 kV substation monitors, protects, and controls the electrical power to the Waste Treatment Plant (WTP) Complex. The substation transforms transmission power to distribution power, which is supplied underground to the WTP 13.8 kV Switchgear Building.	98.4% (-1.2%)	100% (NC) See Note 7	95% (-5%)	97% (NC)

HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY

DATA CURRENT THROUGH MAY 23, 2021

INFRASTRUCTURE SYSTEM		SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS			
			OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION
INFORMATION TECHNOLOGY	Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-66398, Rev 0 Updated Quarterly	This 230 kV substation monitors, protects, and controls the electrical power to the 200 East and 200 West Areas. The substation transforms transmission power to distribution power. This substation also provides backup power to Substation A9, which supplies the 100 Areas.	96.6% (-1.4%)	100% (NC) See Note 7	94% (-6%)	89.0% (-1%)
	Substation A8 (INFRA-SUB_A8)					
	Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-66398, Rev 0 Updated Quarterly	This 230 kV substation monitors, protects, and controls the electrical power to the 100 Areas. The substation transforms transmission power to distribution power.	98.4% (+3.2%)	100% (NC) See Note 7	92% (+16%)	100% (NC)
	Substation A9 (INFRA-SUB_A9)					
	Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-66398, Rev 0 Updated Quarterly	This 115 kV substation monitors, protects, and controls the electrical power to the 400 Area and Laser Interferometer Gravitational Observatory. The substation transforms transmission power to distribution power.	70.7% (-0.3%) See Note 8	100% (NC)	90% (+2%)	81% (-4%)
	Substation 451B (INFRA-SUB_451B)					
	Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-66426, Rev 0 Updated Quarterly	The function of this system is to provide voice and data services to the Hanford Site. System includes the telecommunication equipment at all the core Information Management Facilities.	94% (+1%)	95% (+1%)	100% (NC)	85% (+4%)
	Core Telecommunication Infrastructure (INFRA-TELECOM)					
	Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-66427, Rev 0 Updated Quarterly	This system manages all fiber, copper and wireless outside plant infrastructure. INFRA-OSP includes the fiber summary map and spectrum management map. This system interfaces with other core telecommunication systems.	89% (-5%)	90% (-5%)	92% (NC)	84% (-10%)
	Outside Plant Telecom Infrastructure (INFRA-OSP)					
	Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-65998, Rev 1 Updated Quarterly		95%	96%	100%	89%

HANFORD SITE INFRASTRUCTURE SYSTEM HEALTH AND STATUS SUMMARY

DATA CURRENT THROUGH MAY 23, 2021

INFRASTRUCTURE SYSTEM		SYSTEM DESCRIPTION	SYSTEM HEALTH RATINGS			
			OVERALL STATUS	AVAILABILITY	MAINTENANCE	CONFIGURATION
	Campus Network Infrastructure (INFRA-CAMPUS) Data: Jan – Mar 2021 Last Published: Apr 2021	This system manages all components associated with the end building network connectivity and includes but is not limited to building network switches, indoor wireless access points, telecommunication rooms, backboards and networks logic diagrams. This system interfaces with other core telecommunication systems.	(NC)	(+1%)	(NC)	(-2%)
	HMIS-ENG-66400, Rev 0 Updated Quarterly					
	Special Circuits (INFRA-SC) Data: Jan – Mar 2021 Last Published: Apr 2021	This system manages all of the special circuits providing telecommunications connectivity across the Hanford Site. This system interfaces with the core telecommunication system.	100% (NC)	100% (NC)	100% (NC)	100% (+1%)
	HMIS-ENG-66002, Rev 1 Updated Quarterly					
	Hanford Site Emergency Alerting System Data: Jan – Mar 2021 Last Published: Apr 2021	This system manages all drawings, diagrams and maps associated with the Hanford Site Emergency Alerting System (HSEAS). System includes sirens, message reader boards (MRB), tone alert radios (TAR), and AM radio stations.	80% (+3%)	72% (NC)	86% (+13%)	96% (+2%)
	HMIS-ENG-66442, Rev 0 Updated Quarterly					
	Breathing Air System (INFRA-FIRE_AIR) Data: Jan – Mar 2021 Last Published: Apr 2021	This system provides Grade D, or better, breathing air for Self-Contained Breathing Apparatus (SCBA) bottles, tanks for bottle carts, and emergency vehicles. The system also provides breathing air for SCBA unit testing and repair shops located at HAMMER and Building 609G.	82% (-14%)	70% (-27%)	100% (+10%)	100% (NC)
	HMIS-ENG-66435, Rev 0 Updated Quarterly					
HMIS FIRE SYSTEMS	Radio Fire Alarm Reporter (INFRA-RFAR) Data: Jan – Mar 2021 Last Published: Apr 2021	This system transmits and receives alarm and trouble event signals primarily from facility fire alarm control panels to the Hanford Fire Department Dispatch Center located in the 200 Area Fire Station. RFAR is Factory Mutual-approved and meets NFPA 72.	92% (NC)	94% (-1%)	95% (+3%)	83% (NC)

EXECUTIVE SUMMARY

ROADS	HMIS-ENG-66004, Rev 1 Updated Quarterly	This system alerts building occupants of smoke and/or fire within the building and associated structures, while automatically summoning emergency services because of the activated alarm(s). [HMIS facilities only].	86% (+1%)	95% (+1%)	72% (+2%)	75% (+2%)
	Fire Alarms (INFRA-FA) Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-61894, Rev 1 Updated Quarterly	This system provides automatic controls for fires in buildings using; water, carbon dioxide, dry chemical, clean agents (Halon replacements), and high-expansion foams for the protection of certain portions of buildings or occupancy types. [HMIS facilities only].	82% (-2%)	100% (NC)	65% (-8%)	48% (NC)
	Fire Suppression (INFRA-FIRE_SUPP) Data: Jan – Mar 2021 Last Published: Apr 2021					
	HMIS-ENG-66422, Rev 0 Updated Quarterly	This system provides safe and compliant road networks to support continued operations and closure of the Hanford Site. Major components of the system include primary, secondary, and tertiary roads.	87% (-5%)	86% (NC) See Note 10	78% (-22%)	100% (NC)
	Hanford Site Roads (INFRA-ROADS) Data: Feb – Mar 2021 Last Published: Apr 2021					

Rev. FY21-04

Notes:

1. HMIS-PRO-ENG-61164, *Infrastructure System Health and Status Reports*, describes the process for report and ratings development.
2. In general, the Overall Status is calculated using Availability, Maintenance, and Configuration ratings. For some specific systems, aging or other Design Authority considerations has been factored in and a specific Note is identified.
3. Chart is based on the most recent published data for each system.
4. When data is available from a prior reporting period, the delta increase or decrease in the score is shown in parentheses below the current score.
5. Report includes separate ratings for status of North and South Loops. Overall status for this system exceeds goal value shown in report.
6. Consideration of system aging resulted in reduction of Overall System Status. See report for details on how this affects the Overall System Status score.
7. Report also calculates and presents availability of Bulk Electric System (BES) Transfer Trip Communications System, which is not presented in this summary table.
8. Overall System Status score scaled by 0.75 to reflect age of system and current period issues with transformer B5810C. See report for details.
9. NC = No Change.
10. This score for Roads is defined by the Design Authority as **Condition** in the report, as appropriate to this system.

Rating Legend	Rating Description
≥ 90%	Meets Goal
≥ 70% < 90%	Minimally Acceptable (Below Goal)
<70%	Not Acceptable

Revision Summary:

FY21-01: Updates to reflect latest updates to reports for INFRA-EW, INFRA-RW, INFRA-SW, INFRA-SNS, INFRA-Transmission, INFRA-Distribution, INFRA-EU_SCADA, INFRA-MDMS, INFRA-SUB_A6, INFRA-SUB_A8, INFRA-SUB_A9, INFRA-SUB_451B, INFRA-TELECOM, and INFRA-OSP.

FY21-02: Updates to reflect latest updates to reports for INFRA-EW, INFRA-RW, INFRA-SW, INFRA-SNS, INFRA-Transmission, INFRA-Distribution, INFRA-EU_SCADA, INFRA-MDMS, INFRA-SUB_A6, INFRA-SUB_A8, INFRA-SUB_A9, and INFRA-SUB_451B.

--Start of HMIS Operations (Jan 25, 2021)--

FY21-03: Updates to reflect latest updates to reports for INFRA-SC, INFRA-CAMPUS, INFRA-HSEAS, INFRA-RFAR, INFRA-FA, and INFRA-SUPP.

FY21-04: All reports updated to meet HMIS contract requirements for quarterly reporting of system health and status.

The Overall Status Scores for each system were either in the Yellow or Green score range (i.e., Overall System Status $\geq 70\%$). Included below is discussion of the three individual Red scores across all 20 reports:

- INFRA-RW (Raw Water)
 - o Availability. The raw water system availability score is shown to be 55% in the most recent report (HMIS-ENG-66396, Rev 0). The system configuration remained the same during the January to April 2021 time period due to downtime for construction activities associated with Project L-895 and downtime for known maintenance for the 200 East Area fire pump. The Metron control cabinet supporting the 200 East Area fire pump is down, but walk downs for the job have been performed, work packages planned, and the new cabinet is on site with an expected installation to be next quarter (April to June 2021). Project L-895 Construction continued the pump house renovations at 282W and will continue into at least the next quarter. The availability items discussed here did not affect service for the raw water system due to the level of redundancy that has been engineered into INFRA-RW system and there was no interruption to raw water service during the reporting period.
- INFRA-FIRE_SUPP (HMIS Fire Suppression Systems)
 - o Maintenance. The fire suppression systems maintenance score is shown to be 65% in the most recent report (HMIS-ENG-61894, Rev 1). The score for the quarter was negatively impacted due to a low performance level of backlog corrective maintenance associated with fire suppression systems in HMIS facilities. It is expected that an increased level of backlog preventative maintenance will be accomplished during the next quarter.
 - o Configuration. The fire suppression systems configuration score is shown to be 48% in the most recent report (HMIS-ENG-61894, Rev 1). This is due to the discovery of more open engineering changes on the system drawings than were previously known and resource limitations/priorities during the period covered in the current report. Additional resources have been added to this effort and it is expected that progress will be made on resolving the open engineering changes and bringing new and revised documentation into the technical baseline. These actions are anticipated to improve the configuration score in the next quarterly report; however, it may take two to three quarters to move the score solidly into the Yellow score range on the way to Green.

11.0 GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

HMIS Contracts is currently reviewing the J.11 table in relationship to C.3 of the contract and J.10.2. Needs identified to date are identified in the following table.

Table 8. Government Furnished Services and Information

Contract Section	Identification	GFS/I	Due	Status
Nothing to report				

12.0 DOE ACTIONS/DECISIONS

Program Services and Support: Refer to Section A of this report for Program Services and Support specific DOE actions/decisions.

Reliability Projects: Refer to Section B of this report for project-specific DOE actions/decisions.

Section A



Program Services and Support

1.0 PROGRAM SERVICES AND SUPPORT SUMMARY

Key accomplishments and progress towards completion of goals and objectives, for the month of May included:

President's Office:

- Chief of Staff/Communications/External Affairs/Special Projects
 - o HMIS worked with Hanford Office of Communications (HOC) and OHC Communications and Environmental, Safety, Health, and Quality (ESH&Q) teams to develop and edit messaging, frequently asked questions and briefs related to COVID-19 safety protocol changes.
 - o HMIS organized and managed all aspects of a virtual public meeting on the M-091 Tri-Party Agreement (TPA) milestone series. Support included circulating publications promoting the event, meeting logistics and facilitation, and drafting a top manager's summary.
 - o HMIS participated in five Hanford Advisory Board (HAB) virtual meetings and two calls. HMIS prepared and conducted the monthly TPA public involvement officer meetings. HMIS also strategized with DOE HAB leadership, provided remarks, and answered questions as needed during events. Staff took notes, photos and drafted the top manager summaries for DOE management.
 - o HMIS created a tracking tool that will assist DOE HAB staff in forecasting actions and anticipated deadlines. The tracking tool will be useful for time management and delineating ownership for assignments.
 - o HMIS supported a video production for the Hanford Site on "Why I Got Vaccinated." The video was shared with all employees through DOE/contractor email messages. The video was also published on the Tri-City Herald's website to promote the community benefits of being vaccinated.
 - o HMIS prepared the monthly local media entries for both the Tri-City Herald and the Journal of Business. The entries show the month's active comment periods, public meetings and HAB meetings.
 - o HMIS drafted and/or edited and sent 11 general delivery messages in May, focused on COVID-19, Hanford Local Area Network (HLAN), security and traffic.
- Ethics
 - o Hosted an "All Leaders" meeting where the DOE-OIG presented Fraud Awareness training to participants. The OIG introduced themselves and explained the different roles they have at Hanford (investigations, audits, inspections and special projects), then gave an informative briefing with recent OIG fraud cases and the associated outcome so our management team can be aware of how fraud occurs and signs to look for as a manager.
- Employee Concerns
 - o Nothing to report.

Business Integration and Operations:

Business Integration and Operations (BI&O) had its first All Hands meeting on May 6. 135 staff were invited to a virtual meeting and approximately 120 attended. The topics for discussion were Safety, Organization Enhancements, and Management Perspective – Goals and Objectives. Additionally, challenges that COVID-19 brought to team building and ways that the organization could overcome those challenges were addressed. Senior Vice President (VP) of BI&O, HMIS, stated how impressed he was with how successful the group has been with teleworking. President of HMIS popped in and addressed the group. Each Director addressed their respective group with the goals that developed from the All Managers meeting held April 29, 2021.

- Site Mission Integration
 - o Submitted two Performance Incentives on May 27th, 2021, ahead of the scheduled FY2021 PEMP target dates. The remaining Hanford Life-Cycle Cleanup Baseline (HLCCB) gap analysis recommended resolutions and Final Integrated Site Planning Framework were completed and submitted to DOE.
 - o The final draft of the Hanford Integrated Priority List (HIPL) was reviewed and submitted to DOE Management. A follow-on meeting was held to finalize disposition of comments. Subsequently, the final HIPL and HIPL criteria were submitted to the DOE Management team for future discussions with stakeholders and the DOE Executive Strategy team.
 - o HLANCostPlan, a custom application that contains work breakdown structure (WBS) dictionaries, amongst other scope and estimating elements, has been implemented into production on May 17, 2021. On June 10, 2021 HMIS will provide DOE-RL a demonstration for post-contract baseline WBS dictionary repository consideration.
 - o Site Mission Integration (SMI) continues coordination of the Site Portfolio Remobilization Plan. The HMIS team developed and presented the COVID-19 Local and State data driven dashboard to DOE, created a Site Weekly COVID-19 tracking tool, and supported Site input into the DOE Office of Environmental Management (EM) requested COVID-19 weekly tracking tool.
 - o HLCCB dashboard initiated by conducting a crosswalk of potential existing systems. Several existing applications are outdated and are in noncompliant. Kick-off meeting held May 27, 2021 with Tank Farms team to discuss PowerBI options and path forward to establish requirements. Meeting with DOE-RL Project Controls Officers was moved to June 1, 2021.
 - o SMI support development and update to the Hanford Site Stimulus list, as requested by DOE. Coordinated with WRPS and ORP regarding high-level waste reclassification opportunities for presentation to Ecology as part of holistic negotiations. Completed review of integrated fiscal year 2022 performance evaluation and measurement plans for DOE AMB.
- Procurement
 - o BTR Responsible Manager Training (CBT AMBT04) has been finalized. Training will be available June 2021.

- o Kicked off discussions on C.5 DOE Small Business Procurement Pre-Award Support with DOE-RL and HMIS field teams. On track to complete draft deliverables by June 30, 2021.
- o Held meeting with OHCs and DOE Small business Program Managers to finalize agenda for Subcontractor Quarterly to be held June 30, 2021. The Subcontractor Quarterly meeting moving forward will be a One Hanford approach with HMIS leading the effort. Focus will be on providing information to subcontractors on how to do business at Hanford and what opportunities each prime has coming up in the next 90-120 days and where to find these opportunities.
- Finance & Accounting
 - o Nothing to report.
- Business & Prime Contract Administration
 - o HMIS Prime Contracts processed 1 Contract mod, 43 letters from RL and 85 letters to RL. Of those 85, 28 of them were Contract Deliverables. 251 other pieces of correspondence were processed and that includes OHC correspondence, emails put into Integrated Document Management System (IDMS) and other misc correspondence not from RL.
- Business Process Compliance & Invoicing
 - o During May 2021, two invoices were submitted to DOE-RL totaling \$32.5M for the work scope directly funded by DOE-RL, and 420 invoices were submitted to the Other Hanford Contractors totaling \$11.2M. Business Process Compliance & Invoicing also responded to comments from RL on invoice HM20210701, with payment anticipated in mid-June. Preparations are also in progress for submitting the next invoice to DOE-RL on June 10th.
 - o Business Process Compliance (BPC) continued the development of multiple business analytics regarding Code of Account (COA) Usage, training on overtime, timecard non-concurrences, and the pre-loading of time sheets. During May the final testing, peer review, and data validation on the analytic for COA Usage was completed with an anticipated release into production in June.
 - o BPC provided approximately 74 telemetry related trip reports to managers with government vehicles for evaluation. BCP also incorporated several updates to the telemetry data based on feedback from Functional Service Areas.

Infrastructure & Site Services:

- o Fire Systems Maintenance (FSM) executed several maintenance items, allowing for the closure of 33 fire system discrepancies in the month of May. Many of these were system restrictions which have the potential to impact the ability for fire suppression systems to operate appropriately in the event of a fire.
- o FSM and Central Maintenance have remediated areas of mold in the FSM shop, resulting from a previous water cooler leak. This will allow for the closure of a safety log item for the group.

- o Updated test cases to start the 11.6 upgrade. These test cases will need to be completed to support the Safety and Quality Assurance (SQA) approval of INFOR EAM. Continue to work through the SQA process to bring the system into compliance.
- o Approved Inter-Contractor Work Order (ICWO) to replace the 271T HVAC unit, heat pump and associated Copper piping.
- o Setup Teamsters and Hanford Environmental Oversight (HEO) support to provide information into the Resource Allocation process through Enterprise Asset Management (EAM) scheduling.
- o Held an EAM training session with Fire Systems and SAS to go through modules of EAM to help better understand the transition of Job Control System (JCS) to EAM.
- o Worked closely with the Office of Security and Emergency Services (SES) team on Safety Case Requirements (SCR) for either upgrades or fixes in Infor EAM
- o Continued the transition of Fire Systems Maintenance (FSM) [JCS Station Project Mangers (PM)] into EAM, exporting, importing Components and other documentation
- o Worked with the Hanford Laboratory Management and Integration, LLC (HLMI) EAM Administrator to set up transitioned personal into the HMIS ORG (For access to Resource Allocation)
- o 2261 Stevens Vacate Project: Relocating Information Management to Federal Building Basement. 2261 Stevens lease will be turned back over to the owner in September 2021. Information Management (IM) group will use the Federal Bldg. PACE area as “hoteling space” for entire group.
- o Maintenance and Testing Equipment contract Mod 4 waiting final signature with Energy Northwest.
- o L-934 Trailer Project: 4th and Baltimore. This project consists of two 6-wide trailers and two 4-wide trailers. Estimated construction to be completed in July. Furniture procurement started.
- o Operation Support Services Conduct of Operation (CONOPS) team was fully staffed in May, which allowed the team to focus on opportunities to observe work practices across HMIS. Of note is the Fire System Maintenance (FSM) organization, which faced significant organization changes at transition. The CONOPS team has been working diligently with FSM leadership and staff, identifying opportunities to fine tune CONOPS principles in their work practices from improvements to procedure language to resolving challenging work situations. The CONOPS team has noted a significant improvement to worker involvement and feedback.
- o The Procedure Management team co-sponsored the Procedure Release/Clearance Kaizen which was challenged with streamlining the method by which HMIS procedures used/referenced outside of the HMIS Procedure System were cleared for public release. The Kaizen team successfully created a streamlined integrated process, combining both the separate Procedure Revision and Information Clearances into a singular Procedure System workflow. Additional improvements include using the Procedure System to process these clearances, eliminating the need to process these procedures through the Clearance Document Module and IDMS Workflows; and automating features such a creating document versions, and sending notifications which communicate to the subscribed distribution list when a procedure has been cleared for

public release through the new integrated procedure system workflow. The out brief was held May 26 and the Get-to-Excellence Plan was entered into Integrated Contractor Assurance System (iCAS). Software Engineering Services has begun initial steps to develop the necessary planning documents to update the Procedure System. This process is anticipated to be implemented in September 2021.

- o EU worked in conjunction with HAMMER Training Facility to provide a portable generator for DOE-0336 (Lockout Tagout) training. It will be used as a prop to assist in creating tagout authorization forms (TAF), and will be instrumental in training workers on the unique Lockout Tagout issues involving generators. This is excellent exposure for the students as site cleanup activities are requiring more generators.
- o EU continued multiple cutover activities assisting L-789 project progress, coordinating with CPCC, Fire System Maintenance, Central Facility Maintenance, and vendors to facilitate several planned electrical outages.



L-789 Project Support – Planned Electrical Outages

- o EU Meter Relay Technicians continued replacing cubicle doors and substation obsolete analog meter and relay equipment at A8 Substations.
- o As part of CPCCo's footprint reduction of the 100K area, EU Substation Electricians grounded the temporary construction fence installed by CPCCo at A9 Substation in order to bring the fence into regulatory compliance and address a potential safety hazard from the overhead high-voltage lines.
- o EU Engineering completed the 60% design review of Project L-861. This was in support of the Projects Delivery group to repair and replace the aging Electrical Distribution System in 200 East and 200 West.

- o EU Engineering completed the 100% design work for the Engineering Test Facility (ETF) Steam Stripper and Grout Facility Upgrades. Support Direct-Feed Low-Activity Waste (DFLAW) and waste processing for the Waste Treatment Plant (WTP) facility. ETF is undergoing major upgrades in support of WTP, adding two 2500 KVA Transformers and one 1000 KVA Transformer. A new dedicated feed from Line 6 is required to support this load.

Interface & Integration Services:

- Interface Management:
 - o HMIS Interface Management routed for review and received final approval to publish the Administrative Interface Agreement (AIA) between WRPS and HMIS for Commitment to Tank-side Cesium Removal (TSCR) Operational Readiness Support (TOC-AIA-HMESC-00093, Rev. 1) the week of May 3, 2021. The purpose of this AIA is to ensure that the HMIS-provided services for the Tank-Side Cesium Removal (TSCR) Project are clearly defined and in place prior to TSCR operations.
 - o The HMIS Service Catalog Team met on May 12, 2021 and reviewed feedback from CPCCo on a recent demonstration of the HMIS overtime request service catalog form. CPCCo is interested in implementing a similar overtime request form and process for their employees to use. Because the form requirements are quite different, the agreed upon approach is to develop a separate form for CPCCo, rather than modifying the existing form to meet the needs of both companies. HMIS will gather and present their recommendation to CPCCo and it is anticipated that CPCCo will submit a service request for HMIS to begin developing the new service catalog form.
 - o HMIS Interface Management and HMIS Crane and Rigging supported WRPS the week of May 16, 2021 by reviewing and approving Washington River Protection Solutions LLC (WRPS's) request to update Service Delivery Document (SDD), SDD-35, Crane and Rigging, to reflect WRPS's newly implemented program to monitor all tank equipment lift that occur within a 300-ft. radius of WRPS's Tank-Side Cesium Removal (TSCR) Project.
 - o HMIS Interface Management met with CPCCo and Pacific Northwest National Laboratory (PNNL) via Teams the week of May 17, 2021 to discuss ongoing projects in the 300 Area, including fire hydrants, long-term surveillance and maintenance, transfer of Johnson Controls Inc. (JCI) steam boilers, water and sewer utilities projects, and roads maintenance projects.
 - o HMIS Interface Management and the Hanford Fire Department (HFD) met with WRPS and CPCCo on May 17, 2021 and May 18, 2021, respectively, to present recent procedural changes to the rescue standby service, provided by the HFD at the request of the OHCs. The parties discussed and agreed that an inter-contractor Kaizen would be the best means of addressing questions and differences in approach regarding the need for HFD to provide on-site standby rescue services for OHC projects. HMIS Interface Management took the action to work with the OE Team in planning and scheduling the Kaizen event.
 - o HMIS Interface Management issued the Interface Control Document (ICD) between WRPS and HMIS for the Electric Utilities Distribution System (HNF-4492, Rev. 8) on

May 26, 2021. This AIA was updated to include a requirement for WRPS to obtain a release from HMIS before performing work on electrical utilities equipment. In addition, a table that listed electrical loads per facility was deleted, because WRPS now will provide this data in the annual 10-Year Electrical Load Forecast.

- HAMMER:
 - o Effectively collaborated with site contractors to address the large bow wave in training that was forecasted this summer. This bow wave was created due to the HAMMER COVID-19 shutdown and large number of core training classes conducted upon restart. Training coordinators pulled students back into March, April, and May to level out training due dates.
- Site Integration Services
 - o Fleet Services:
 - Nothing to report this month.
 - o Warehouse & Property Management:
 - Began working with CPCCo Property Management on creating/combining process forms where practical for Multi-Contractors use. Current Property Management Forms in consideration include the Inter-Contractor Transfer Order (ICTO), Loss/Damage/Destruction Report (LDDR) and the Plant and Equipment Transfer (PET).
 - HMIS Site Integration Services was contacted by Maintenance Management Programs last month asking for assistance in reconciling a facility record. The unit in question was a single wide mobile office in the 200 East Area that appeared to be abandoned. The Hanford Fire Marshal's office indicated due to the age, and the fact that it still appeared to be electrically connected, posed a potential fire and safety hazard. The unit did not appear in the Site's property records, but it was determined that the legal owner since the late 1990's was Intermech, a Hanford Site Subcontractor and Intermech agreed the unit would be removed as soon as possible. The team included WRPS (Intermech's prime contractor), Intermech, HMIS Real Estate Services, HMIS Maintenance Services, and HMIS Radiological Protection in which a plan was developed removal of the unit was completed on May 5, 2021.



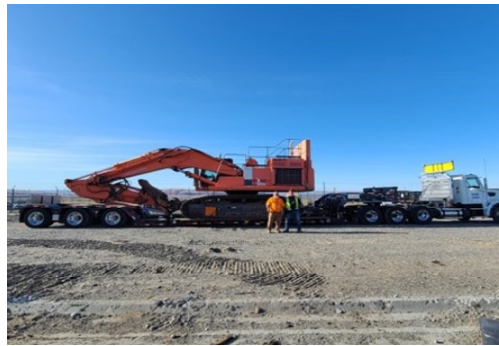
Facility Unit Removal

- o Transportation Services:
 - HMIS Interface & Integration services Teamsters, Storekeepers, and the Crane & Rigging team, load two pumps for transport to the WRPS laydown yard.



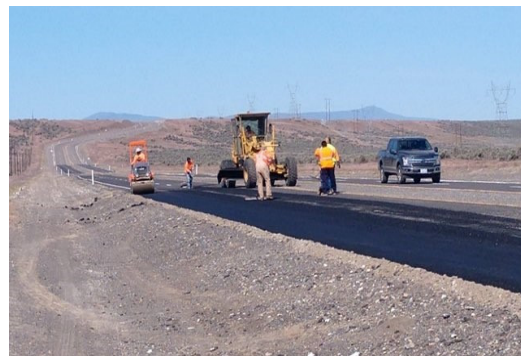
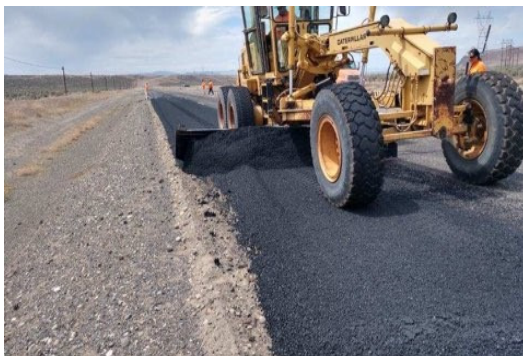
Crane & Rigging Pump Transport

- HMIS Interface & Integration services, Heavy equipment operations Teamsters, move a Hitachi 50 excavator for CPCCo



Hitachi 50 Excavator Transport

- HMIS Interface & Integration services, roads and grounds Heavy equipment operators and Teamsters, rebuild the shoulder of the eastbound lane of Rt. 11A.



Roads & Grounds Teamsters Rebuild Shoulder

- o Crane and Rigging:
 - HMIS Crane & Rigging supported WRPS in the replacement of the Thin Film Dryer (TFD) Rotor at the Effluent Treatment Facility. Crane & Rigging utilized three cranes during the work evolution. One 80-ton RT crane for fall protection for crew members on the roof. One 80-ton to lift the old rotor out through the roof of the building and place the new rotor in. One 4 ½-ton Broderson Carry Deck crane to assist in transitioning the old rotor from vertical to horizontal then in reverse order for the new rotor. The rotor replacement also included erection of a significant scaffold assembly by Crane & Rigging inside the TFD room, a contaminated area, to access the roof.



Replacement of Thin Film Dryer (TFD) Rotor at the Effluent Treatment Facility

Mission Assurance:

- o HMIS Performance Oversight supported DevonWay iCAS implementation and software documentation for CPCCo. The addition of CPCCo into the production environment represents a successful site-wide implementation of this software package; all prime contractors are now able to utilize the system along with DOE. This will lead to improved efficiency and consistency of oversight activities at Hanford.
- o DevonWay integrated Contractor Assurance System (iCAS) SubscriberConnect functionality was implemented in May 2021. This functionality allows all findings from DOE Operational Awareness reports to automatically be input into each contractor's iCAS area. This upgrade ensures all issues requiring corrective action are entered and screened in a timely fashion.
- o The HMIS Acquisition Verification Services (AVS) group performed receipt inspection of quality level 1, 2, and 3 items on behalf of the prime contractors. AVS completed the receipt of 166 receivers, comprising of 344-line items, and generated 27 non-conformance reports (NCRs).

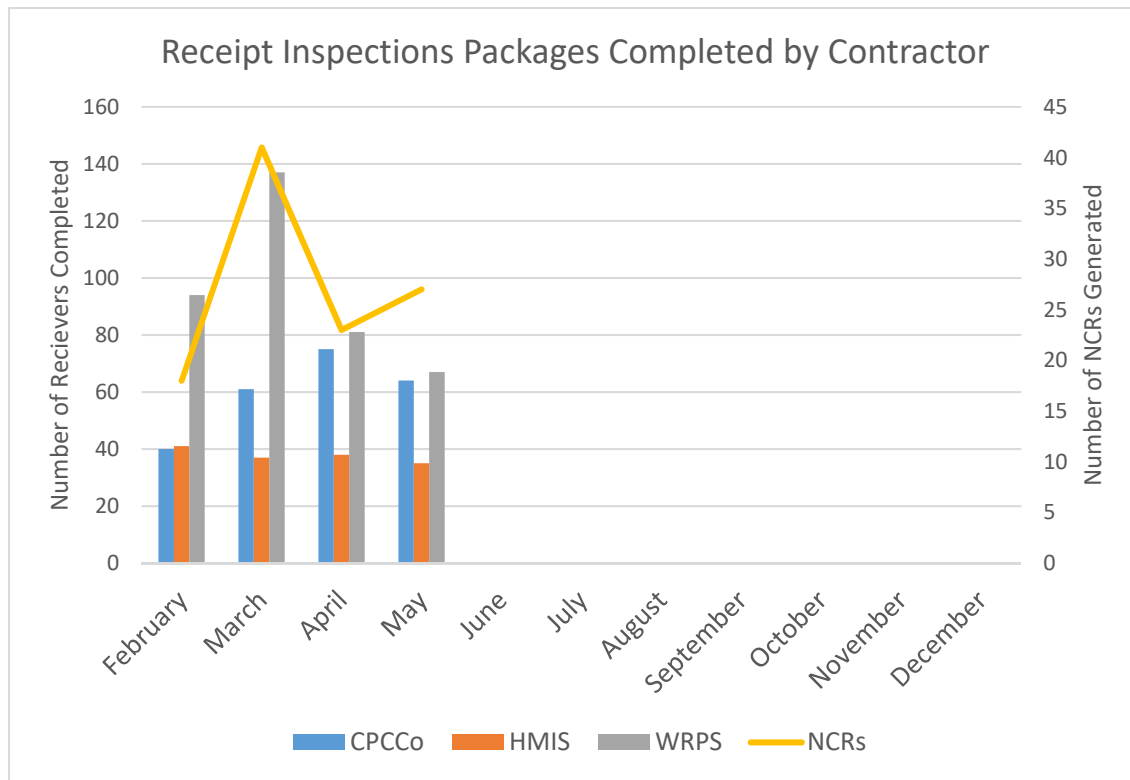


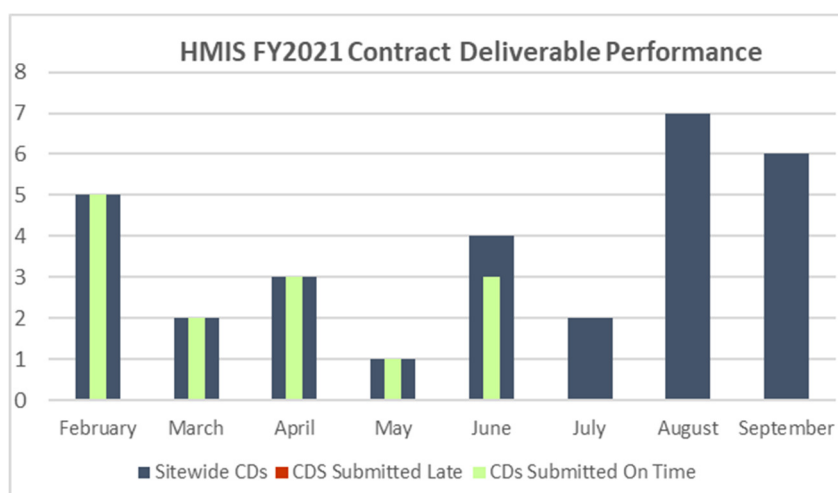
Figure A-1. Receipt Inspections Packages Completed by Contractor

- o HMIS Quality Assurance Engineers provided oversight of subcontractor activities and reliability project activities by reviewing 265 documents including statements of work, design, construction and procurement project documents, and participated in 19 field oversight/witness activities.
- o HMIS operates the Centralized Consolidation/Recycling Center (CCRC) and receives Universal Waste (UW) and other types of recyclable commodities from all site contractors. The table below represents the volume of waste received by the CCRC for the month of May. (There were no offsite shipments this month).

Table A-1. CCRC Shipments

Items Shipped to the CCRC During May FY2021								
Material Received		Received From						Totals
		HMIS	CPCCo	WRPS	PNNL	WTP	DOE-RL	
Mercury Containing Equipment	Gross Pounds							0
Non-PCB Ballasts	Gross Pounds	159	15.80			453.20		628
UW Lamps (All Types)	Gross Pounds		100.50	35		42.80		178.30
UW Batteries (All Types)	Gross Pounds		76.20			242		318.20
Lead Acid Batteries	Gross Pounds	7831						7821
Aerosol Cans	Cans Received							0
Aerosol Cans	Cans Punctured							0

- o Environmental had one Contract Deliverable due and submitted in May: CD0111, “Recommendation to DOE on Need to Update Hanford Cultural Resources Management Plan.” Three Contract Deliverables due in June were also submitted in May. The Contract Deliverables were (1) CD0318, “Annual Radionuclide Air Emissions Report,” (2) CD0308, “Hanford Site PCB Annual Report,” and (3) CD0309, “Annual Hanford Site PCB Document Log.”

**Figure A-2. Environmental CD Performance**

- o Ecological Monitoring and Compliance (EMC) staff received six new requests for Ecological Compliance Reviews during the month of May. EMC staff performed three surveys as part of the Ecological Compliance Review process. EMC staff issued

Ecological Clearance Notifications to Proceed for fourteen projects and issued No Review Required (NRR) emails for two projects during the month of May.

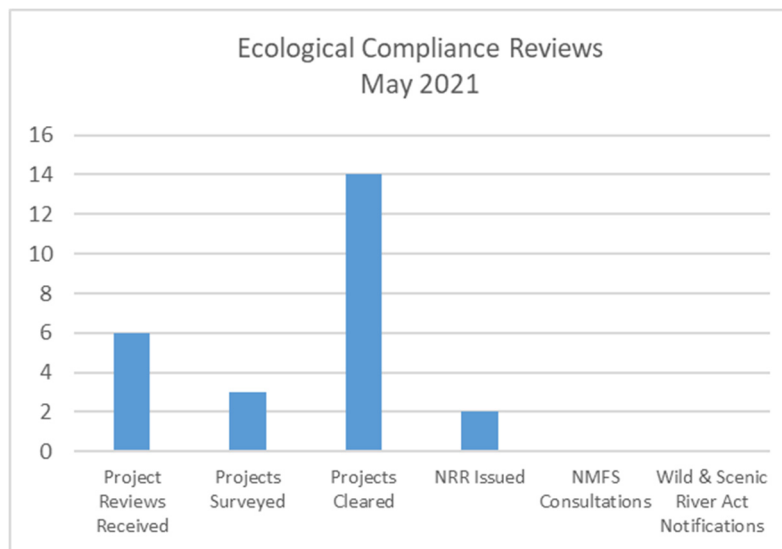


Figure A-3. Ecological Compliance Reviews

- o Environmental Cultural and Historic Resource Protection (CHRP) program received one new request for National Historic Preservation Act (NHPA) Section 106 Project Review during the month of May. CHRP staff did not conduct any surveys as part of the Section 106 process. On behalf of DOE-RL, CHRP staff reviewed two cultural resources documents for professional standards, quality, and compliance with NHPA Section 106 requirements. CHRP issued Cultural Clearance Notifications to proceed for four projects after completing all Section 106 requirements. Cultural resources monitoring did not occur this month. Currently, DOE-RL is not consulting on any MOAs with the Washington State Historic Preservation Office (SHPO) and area Tribes.

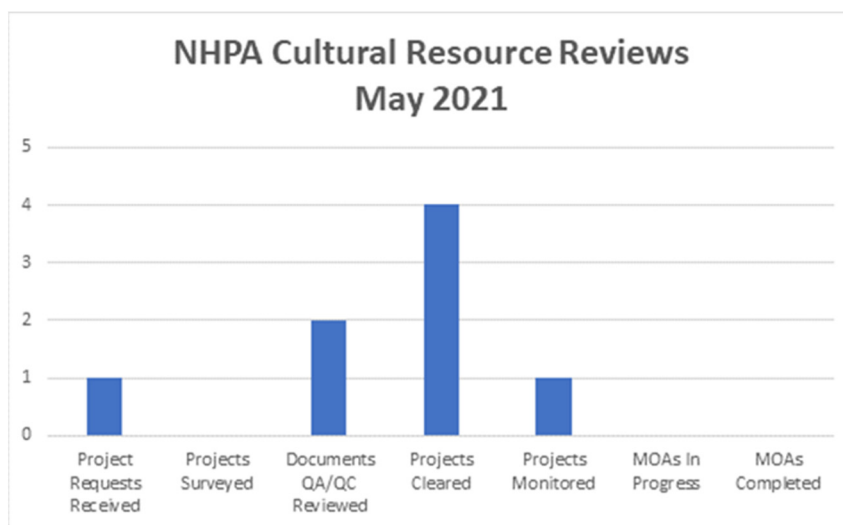


Figure A-4. NHPA Cultural Resource Reviews

- o HMIS has the responsibility to integrate, facilitate, and document regulatory agency inspections of DOE facilities on the Hanford Site for all Hanford Site contractors. Those responsibilities include providing support to DOE and Hanford Site contractors during regulatory agency inspections occurring on site and tracking those inspections in the Regulatory Agency Inspection Database (RAID). Below is a summary of the regulatory agency inspections that were supported by HMIS for May 2021.

Table A-2. Sitewide Inspection Status

Sitewide Inspection Support for May 2021							
Company	Other	EPA	ECY	WDOH	DOE	Date	Subject/(Raid #)
HMIS					1	5/3-4/2021	• RCRA Permit Inspection of the 200 East Area (2021-023)
WRPS			1	2		5/12/2021	• Ecology RCRA Inspection of the 242A Evaporator (2021-024)
						5/25/2021	• WDOH Air Inspection Passive Radial Filters at the 241-T Tank Farm (2021-025)
						5/25/2021	• WDOH Air Inspection Passive Radial Filters at the 241-TY Tank Farm (2021-026)
TOTALS			1	2	1		

- o HMIS generated and provided to the DOE-Office of Chief Counsel (OCC), a consolidated Excel file containing all the active DOE-RL Tri-Party Agreement (TPA) milestones and DOE Office of River Protection (DOE-ORP) TPA Milestones and Consent Decree requirements as a quick reference tool. DOE Office of Chief Counsel

(DOE-OCC) was particularly interested in seeing the 110-day Notification Due Dates for all the active TPA milestones, as the 110-day Notification Date provides DOE TPA Milestone modification rights and protects their dispute resolution rights under the TPA as long as the notification requirement to the lead regulatory agency has been met. HMIS added the 110-day Notification Due Dates into the file and will continue to provide this file to DOE-OCC at the beginning of each month.

- o HMIS prepared material for and facilitated the May 20, 2021 online meeting of the Tri-Party Agreement (TPA) Inter-agency Management Integration Team (IAMIT). The IAMIT is a decision-making forum comprised of TPA agency top management, and is where, among other things, the Tri-Parties are asked to settle TPA disputes and make TPA-related binding determinations as necessary. HMIS also records actions and provides meeting minutes of IAMIT meetings. Topics discussed at this month's meeting included: an update on the Representative Analogous Site Coordinating Agency Liaisons (RASCAL) TPA negotiations and a presentation by the Washington State Department of Ecology on its FY22 program planning. The meeting also featured an "IAMIT-101" presentation given by HMIS, which covered the history of the IAMIT and its current functions, as well as an ensuing discussion on how to possibly strengthen IAMIT processes. HMIS will be examining those processes in the coming months, including polling the IAMIT members on potential enhancements to the IAMIT decision-making process and IAMIT meetings. HMIS was asked to provide the overview of processes by two new members of the IAMIT.
- o The DOE-RL, U.S. Environmental Protection Agency (EPA), and Washington State Department of Ecology (Ecology) entered into formal Tri-Party Agreement (TPA) negotiations on August 25, 2020, via an *Agreement in Principle (AIP) for the Negotiation of Hanford Federal Facility Agreement and Consent Order Revisions in Response to Federal Fiscal Year 2018-2020 Appropriation in Conjunction with the Representative Analogous Site Coordinating Agency Liaisons Recommendations (Interagency Management Integration Team (IAMIT) Determination 2020-006) for Expediting Remedial Cleanup on the Hanford Central Plateau*. This AIP was extended on January 7, 2021 and April 14, 2021, and expired on May 17, 2021. Expiration of this AIP on May 17, 2021, left 15 TPA interim milestones "In Abeyance". The Parties are not in agreement and therefore, will not sign an AIP extending these negotiations. On May 20, 2021, at the IAMIT meeting, the Parties agreed to temporarily suspend the 15 TPA interim milestones until a path forward is established. HMIS drafted IAMIT Determination 2021-001 to accommodate a 30-day suspension. The Parties provided their comments on the draft IAMIT Determination on May 24, 2021. However, in the meantime, DOE signed and HMIS submitted TPA Change Controls Forms for two of the 15 TPA interim milestones to Ecology and EPA on May 24, 2021, to meet the 90-day and 107-day notification requirements in order to maintain their protection and dispute rights under the TPA. These CCFs are currently with Ecology and EPA and they both have 14-days, until June 7, 2021, to approve or disapprove these CCFs. These are two different TPA processes and HMIS continues to provide DOE-RL support for both.
- o DOE-RL requested assistance from HMIS in drafting the annual Agreements, Milestones, and Decision Documents (AMDD) report for FY21. This report is marked Official Use Only and goes to DOE Headquarters (DOE-HQ), Director, Office of Regulatory

Compliance each year. This report provides DOE-HQ a projection of any new or modified regulatory AMDD that are to be developed over the upcoming two years. HMIS drafted the report and sent it to DOE for review and submittal.

- o Per a request from DOE, HMIS reviewed archaeological collections inventories to identify collections that are held by both DOE and the USACE. HMIS identified two archaeological sites from which materials have been collected and curated by both DOE and USACE. DOE will use this information to discuss with USACE and area Tribes the future storage of these items, with the possibility of consolidating items from the two sites at one repository.
- o The Washington State Department of Ecology (Ecology) provided its commitment to exercise enforcement discretion for proceeding with construction activities on projects L-850, L-895, and L-897 via e-mail to DOE-RL on May 11, 2021. The enforcement discretion applies to a limited set of activities for these three projects and enables the select activities to be completed prior to receipt of Ecology's formal approval order. As several of the select activities are prohibited from commencing until the approval order has been issued, enforcement discretion allows DOE-RL and HMIS to perform the activities without incurring risk of punitive action by Ecology. In order to proceed with these activities, HMIS must receive contract direction from DOE-RL because performing certain aspects of the select activities, prior to issuance of the approval order, are inconsistent with HMIS' contract. The HMIS Contracting Officer requested contract direction from the DOE-RL Contracting Officer via e-mail on May 13, 2021.
- o Curation Services provided integration and facilitation to Central Plateau Cleanup Company and HMIS for B Reactor Facility, Cultural and Historic Resources Program, and Curation Services staff. The intent of the integration workshop was to introduce new staff to the organizations, provide an overview of historic preservation regulations and requirements for historical resources, and to identify opportunities for efficient coordination between the groups.
- o HMIS compiled a statistical sampling data package containing time series plots displaying sampling frequency and maximum concentrations from 1993-2021 for seven toxic air pollutants of concern. The data package supports the development of the Data Quality Objectives (DQO) that are being produced for all Hanford Site toxic emission unit sampling. This data package supports DQO information inputs and defines boundaries during the DQO development process that was initiated in May 2021.
- o HMIS worked with DOE to provide the Tribes with requested, publicly-cleared Geographic Information System (GIS) vegetation layers, the Upland Vegetation of Central Hanford report that outlines methodology for the GIS vegetation mapping layer, and the link to the Ecological Monitoring website that includes numerous reports documenting ecological monitoring work completed on DOE/RL managed portions of the Hanford site since May 2011. The data was loaded on encrypted thumb drives and mailed to the requestors.
- o On May 5, 2021, the Washington State Department of Ecology (Ecology) transmitted a letter to the Department of Energy (DOE) regarding waste management activities at the DOE's Material Handling Facility in north Richland. Ecology's letter indicated the waste management activities performed during calendar year 2020 triggered requirements for payment of a hazardous waste planning fee and an obligation to prepare/submit a

pollution prevention plan. The (DOE) requested HMIS assistance in responding to the letter. Specifically, HMIS is assisting the DOE with preparing a response requesting Ecology concurrence to be exempted from the fee payment and pollution prevention plan submittal obligations. On May 14, 2021, HMIS furnished the DOE with a draft written response for potential use in responding to Ecology's letter.

- o HMIS supported DOE-ORP and Washington River Protection Solutions by tracking two alleged non-compliances cited in a warning letter from the Washington State Department of Ecology (Ecology) regarding their inspection of the Single Shell Tank System. The letter included the compliance report identifying issues with designation information for the waste in Tank 241-U-110, and corrective actions for an observation identified during a facility inspection. Ecology requires response within 60-days. HMIS will track the actions in the Environmental Action Tracking System database.
- o HMIS submitted the Gable Mountain Restoration Project for an Environmental Leadership Award Program (ELAP) award. The Gable Mountain Restoration Project involved restoring over 5,500 acres of habitat after a wildland fire in 2020. The project exemplifies environmental leadership on the Hanford Site through restoration, cost savings, and local procurement, and highlights DOE as stewards of the environment.
- o Environmental air monitoring station has been relocated next to Meteorological Tower 23 (GABW). This new site is west of the Gable Mt. site in a similar location relative to the 200 Areas. This site is well maintained, has good, safe access, and a reliable, long-term electrical power supply. The air monitoring station has been relocated to support vacating Gable Mountain East. This effort is part of a long-term land management strategy by DOE to remove infrastructure from Gable Mountain which is an important area for Native American Tribes.
- o HMIS received notification that the Department of Energy (DOE) Hanford Program received a five-star EPEAT Purchaser Award for electronic procurements completed in fiscal year (FY) 2020 that met the Green Electronic Council's environmental performance standards. Tracking electronic procurements and submitting the award nomination are functions coordinated by the HMIS Information Management Services team, and provided for Hanford site contractors, DOE Richland Operations Office (DOE-RL), and DOE Office of River Protections (DOE-ORP). This is the fifth year in a row the Hanford site has collectively received the highest level EPEAT Purchaser Award. One star is awarded for each product category where the required percentage of EPEAT-registered products are purchased and there is a policy in place to ensure environmental requirements are met. Product categories include computers and displays, imaging equipment, televisions, servers, and mobile devices. The achievement highlights a cost avoidance of \$63,148, greenhouse gas emission reduction of 295,526 kilograms of carbon dioxide, and 1,407,996 kilowatt hours of energy savings, for the 2,604 products purchased in FY2020.
- o HMIS developed a site wide communication regarding employee behavior while working in the field to promote an environmental culture of "leave no trace." During a recent observation while working on site, it was noted that some trash and other miscellaneous objects were left behind by workers. HMIS used the opportunity to develop a sitewide communication to encourage environmental awareness of our work activities and used the seven principles of "leave no trace" as a theme for the communication.

- o Environmental Monitoring (EM) staff completed the annual soil and vegetation sample collections as identified in the Hanford Site Master Sampling Schedule (DOE/RL-2021-02) for CY2021. On May 13, 2021, staff participated in a co-sampling event with Washington State Department of Health (WDOH) personnel at five predetermined sites. Onsite soil and vegetation sampling is conducted annually and required by WDOH as a qualitative indicator of the environmental monitoring program (#FF-01 License, Section 5.1.2). It is also a recommended practice per the DOE handbook DOE-HDBK-1216-2015, Environmental Radiological Effluent Monitoring and Environmental Surveillance.
- o Environmental provided support to Fire Systems Maintenance by organizing disposition of their scrap metal laydown area at 2721EA. An offsite roll-off container from Twin City Metals was delivered on May 4, 2021 and subsequently filled with scrap metal on May 5, 2021. Fire Systems Maintenance craft and HMIS Radiological Control personnel supported the loading of the roll-off container for offsite recycle/disposition. This completed the scrap metal removal evolution and cleaned up the laydown area.



Scrap Metal Disposition 2721EA

- o Environmental provided support to Hanford Fire Department by confirming all pharmaceutical Dangerous Waste had been removed from the 609A Controlled Substance Room Satellite Accumulation Area (SAA). The pharmaceutical waste stream can be managed outside of an SAA with the recent implementation of WAC 173-303-555 regulations. Visual inspection of the subject SAA was completed on May 13, 2021 to support closure and cancellation of the associated Facility Response Plan.
- o Since October 27, 2020, HMIS has been working with the DOE Environmental Safety and Quality Division (ESQ) to develop HNF-66517, Hanford Site Access and Awareness Plan and procedure HMIS-PRO-ENV-62353, Hanford Site Access and Awareness. This plan and implementing procedure are part of the many actions HMIS has been helping DOE track and/or develop which stems from the Memorandum of Agreement (MOA) Between the DOE-RL and DOE-ORP and the Washington State Department of Ecology

Regarding the Hanford Site Ambient Air Boundary, approved on July 23, 2020. Procedure HMIS-PRO-ENV-62353 was published in the HMIS Procedure System on May 26, 2021 and Environmental provided the procedure to ESQ, which completes the procedure requirement in the MOA and met ESQ's schedule to have the procedure published by May 27, 2021, in order to begin a 3-month implementation period of the procedure actions beginning in June 2021. The plan, HNF-66517, was cleared for public release on June 1, 2021.

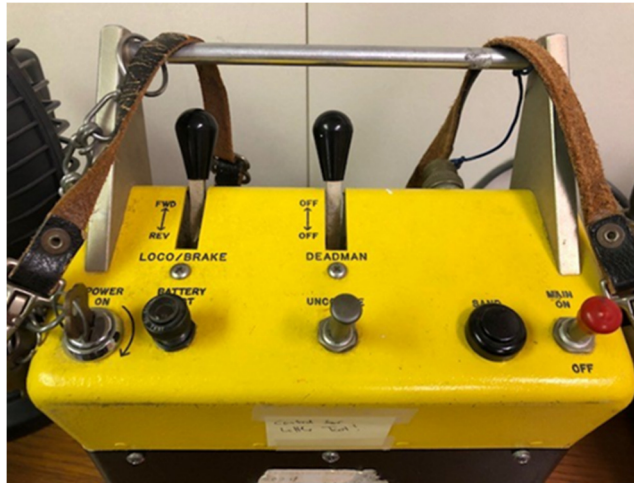
- o HMIS supported the short notice co-collection of High Volume air samples including generation of chains of custody, laboratory notifications, and coordinated with the Washington Department of Health (WDOH) and HMIS Radiological Control Technician sample collector. The co-located samples are collected for the Department of Energy as an independent verification of WDOH sample results that were collected during the planned load out of waste at the PFP.



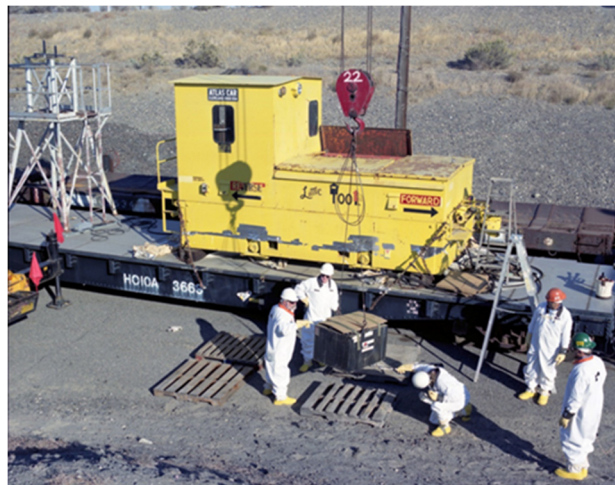
*Washington Department of Health (WDOH) &
HMIS Radiological Control Technician sample collector*

- o HMIS participated in multiple comment resolution meetings the week of May 10 for the 2019 Land Disposal Restrictions (LDR) Full Report. These meetings were attended by DOE-RL/ORP, the Washington State Department of Ecology (Ecology), the Environmental Protection Agency Region 10, and multiple representatives from each of the Hanford Site Contractors. HMIS also supported DOE-RL in a meeting held to brief upper management and legal at DOE-RL and contractors on the upcoming issues for potential dispute resolution regarding the 2019 LDR Report.
- o Curation Services notified the point of contact at the Central Plateau Cleanup Company that the "Little Toot" Controller (T.2020.003) is eligible for DOE's historical Hanford Collection. This item is the controller for the "Little Toot" Atlas car that operated at Plutonium Uranium Extraction Plant (PUREX) at the Hanford Site during the Cold War Era. PUREX became operational in 1956 as Hanford's final, and most advanced

separations plant, by using a continuous flow extraction process involving numerous chemicals. The controller is a component of the PUREX facility, which was a significant leap in technology, specifically in the plutonium production process. Such items document the evolution of science and technology in the nuclear age.



“Little Toot” Controller (T.2020.003)



“Little Toot” Atlas Car

- o HMIS integrated between the Sitewide Mitigation Program, Cultural and Historic Resources Program, and DOE to discuss integration of cultural mitigation into the Site Wide Environmental Mitigation Strategy. It was determined that though cultural mitigation has differing requirements that would not be best met though the Site Wide Environmental Mitigation Strategy, there was an opportunity for mitigation banking to act as an option for cultural mitigations.
- o Environmental worked with HMIS Training and completed development of a qualification card for the National Environmental Policy Act (NEPA) Subject Matter Expert. Management approval was obtained, and the qualification card was provided to HMIS Training, for incorporation into the training system. The qualification card

identifies requirements for education, experience, and training. In addition, an extensive listing of required reading was provided, including NEPA laws, statutes, regulations, guidance, interpretation, and Hanford documents. Finally, training elements are identified, which tests the candidate's knowledge of NEPA regulations hierarchy, initiating and completing NEPA reviews, consideration of other related regulatory requirements, and project files and administrative recordkeeping. This completes iCAS Action Item HMIS-AR-2021-0031, due May 25, 2021.

- o HMIS began preparation of all Project L-888, Southern Area Fire Station, Notice of Construction (NOC) Application air dispersion modeling input, output, and plot files. The files are required to be cleared for public release and will accompany the NOC Application formal submittal to Ecology. Staff provided the draft Project L-888 NOC Application to DOE on May 3, 2021, for a 30-day review, ending June 2, 2021.
- o HMIS staff provided support to Central Plateau Cleanup Company environmental team by completing the air dispersion modeling scoping runs for the waste containers that are proposed emission units at the Integrated Disposal Facility (IDF). The modeling runs will be used in the new source review emissions inventory calculations for the IDF Notice of Construction Application.
- o HMIS staff completed edit incorporation in the *Central Hanford Rare Plant Management Plan*. This plan provides guidelines for rare plant monitoring and management on the DOE-RL managed portion of the Hanford Site. Having set guidelines helps resource managers monitor and manage the plants consistently to ensure stability of the sensitive populations. This data is shared with the Washington Department of Natural Resources to update rare plant status and contribute to listing decisions that impact rare plant protection across Washington State. This document has been sent to DOE for review.
- o Requirements Management had their initial Hanford Site Wide Requirements Management Forum (HSRMF) meeting with Subject Matter Experts at Central Plateau Cleanup Company, Hanford Laboratory Management and Integration, Washington River Protection Solutions, and the DOE. The Forum team members are performing an informal review of the HSRMF Charter with comments due back on Thursday, May 13, 2021. This forum has been established to get Subject matter experts (SMEs) together to choose a requirements management software platform for site wide use and will mimic the rollout of the iCAS system to make requirements management a site wide system accessed and managed by the prime contractors.
- o HMIS conducted the required Resource Conservation and Recovery Act (RCRA) Permit General Inspection of the 200 East Area on May 3 and 4, 2021. Representatives from DOE-RL, Central Plateau Cleanup Company, Washington River Protection Solutions, and Washington State Department of Ecology also participated in the 2-day inspection. Areas outside the buildings were inspected for mismanaged waste items. There were no RCRA issues observed. There were some observations that were corrected during the inspection, and some that will require follow-up evaluation and possible corrective action. HMIS will track the observations in the Regulatory Agency Inspection Database.
- o Environmental provided a presentation to HMIS Environmental Compliance Officers (ECO) on May 26, 2021 regarding sustainable acquisition tools available for researching environmentally friendly product alternatives. The presentation included sustainable acquisition drivers and requirements, product category explanations, online resources,

and available product examples using the Green Procurement Compilation and Sustainable Facilities Tool (SFTool). ECOs play a vital role in providing customer service to functional and project organizations and can help guide employees through finding green product alternatives that work effectively for the intended function. The environmental education was also provided to other Hanford Contractors as support for site wide environmental integration.

- o HMIS participated in a meeting with DOE and staff from the Confederated Tribes and Bands of the Umatilla Indian Reservation (CTUIR) to discuss on-going efforts by the tribe to research traditional cultural practices across their usual and accustomed places and ceded lands. The subject of the meeting centered on information about botanical and ecological resources on the Hanford Site. This information could be useful for the CTUIR in their efforts to research Ethnobotanical resources and how traditional use plants like First Foods provide insight to cultural traditions that may aid in future land management efforts.
- o Environmental continued working with the procedures group to finalize a stand-alone trespassing procedure for Water & Sewer Utilities (W&SU) to outline the requirements for W&SU staff to implement to satisfy the requirements of *Memorandum of Agreement Between the DOE-RL and DOE-ORP and the Washington State Department of Ecology Regarding the Hanford Site Ambient Air Boundary*, approved on July 23, 2020. This procedure was issued on May 26, 2021 and forwarded to the W&SU Operations Manager for implementation.
- o Environmental supported Water and Sewer Utilities in an effort to determine the source of high biochemical oxygen demand (BOD₅) results at the Evaporative Sewage Lagoons. Environmental walked down 448 facilities in the 200 East Area and 100K area to identify sources of products being introduced into the sewage system, resulting in BOD₅ permit limit exceedances. The survey was completed on May 20, 2021. Results will be presented to HMIS upper management and then to DOE RL.
- o Environmental observed final closure of the 1607-B5 Septic Tank located at the 181B on May 25, 2021. Because of the depth of the septic tank, grout was used to fill the tank and close it.



1607-B5 Septic Tank Final Closure

- o The HMIS Unmanned Aircraft System (UAS) team has been working on project coordination for development of an UAS program for the Hanford Site. The program

includes a UAS Safety Program Plan to set up the UAS Program, an updated Aviation Implementation Document for DOE and setting up a flight management request software system. The HMIS draft Small Unmanned Aircraft System (sUAS) Safety Management System Program Plan is complete and will be revised once pilot flights occur. The Request for Proposal for UAS Services has closed and proposals were reviewed by the HMIS UAS team and are now currently being evaluated by the procurement team. The HMIS UAS team is continuing to go through Part 107 UAS training to become more familiar with terminology and UAS regulations. The flight management system software continues to be developed and is on track to be available for the first pilot flight. The Counter UAS (C-UAS) Plan was resubmitted to DOE-RL April 29, 2021 and is currently waiting for DOE-RL approval. The HMIS Cyber team has been asked to complete a cyber-risk assessment for the UAS program. The cyber-risk assessment was submitted to DOE-RL on May 26, 2021. A DOE-RL/HMIS UAS Project update meeting occurred on May 26, 2021. DOE-RL Security and HMIS Security have agreed to meet the week of June 1, 2021 to work through issues identified in the C-UAS Security Plan. All DOE-RL approvals have been requested to be completed no later than June 30, 2021. A new requirement to produce a UAS program business case analysis by August 31, 2021 was listed in the HMIS Performance Evaluation and Measurement Plan. The HMIS UAS team has started research and drafting the UAS business case analysis. The HMIS UAS team is working to a tight project schedule and has routine team and management meetings.

- o HMIS prepared documentation for the disposal of two >500 Parts Per Million PCB ballasts that are being staged in the 2101M Small Cage PCB 30-day storage area. These will be shipped to the 4734B PCB storage for disposal area in the 400 area.
- o The 2021 HMIS Safety Culture Sustainment plan was submitted to DOE RL.
- o Health Physics Dosimetry Advisory Committee (HPDAC) voted to end use of negative results letters for bioassay procedures. Preliminary negative-result letters are currently handed to employees as they exit the in-vivo counters and sent when results come back from the vendor for excreta samples. Employees will be notified in an all-employee communication in June, in the instructions for the in-vitro kits, and in person at the in-vivo counting facility. Employees will continue to be notified immediately of in-vivo counts that require recount or other follow-up.
- o Vendor completed the annual calibration and maintenance of the Hanford Radiological Instrumentation Program's Hopewell irradiators. No issues were noted.
- o HMIS supported the annual field exercise, which included plume tracking activities and assisting personnel at Lady of Lourdes Medical Center with contamination control associated with the transportation and decontamination of an injured individual.

Safeguards, Security & Emergency Response:

- o The FY21 Hanford Site Annual Field Exercise was successfully conducted at the Waste Encapsulation and Storage Facility (WESF) on May 20, 2021 to test and validate the effectiveness of the Hanford Emergency Response Organization. In addition to WESF personnel, the exercise included participation by the Hanford Fire Department, Hanford Patrol, Hanford Emergency Operations Center (EOC), HPMC, HMIS Radcon, Lourdes

Medical Center, and local states and counties. The exercise successfully incorporated COVID-19 controls to ensure the safety of participants.

- o HMIS Hanford EOC Shift Office categorized an Abnormal Event (AE) for the reported B-109 tank leak on April 29, 2021. It was determined the event met AE reporting under the Environmental category, criterion (1) Release of a radioactive material that violates environmental requirements (including monitoring requirements) in Federal permits, Federal regulations, or DOE standards. The DOE Office of River Protection determined that underground single-shell tank B-109 at the Hanford Site is likely leaking to the soil beneath the tank. The determination was made after monthly monitoring detected a small drop in the level of liquid in the tank. A formal leak assessment began in 2020 and concluded on April 29, 2021.
- o HMIS EM&P staff collaborated with General Services Administration and Federal Protective Service to revise the Federal Building Occupant Emergency Plan (OEP). The purpose of the OEP is to provide building-wide, interagency direction to building occupants during an emergency. The OEP includes emergency procedures and instructions for employees and visitors in the Richland Federal Office Building and the U.S. Courthouse.
- o HMIS EM&P staff and Hanford EOC Site Emergency Directors attended a Teams briefing on the Tank Side Cesium Removal (TSCR) System in the 200 East Area on May 6, 2021. The TSCR will provide pre-treated tank waste to the Direct Feed Low Activity Waste facility at WTP. WRPS Emergency Management's Technical Analyst provided an overview of the TSCR facility and the revised facility emergency action levels.
- o HMIS EMP staff provided the following support to OHCs and DOE-RL/ORP:
 - o Emergency Operations Center position-specific training to five students
 - o Hanford Incident Command System/Building Emergency Director/Facility Emergency Response Organization Training to 22 students.
 - o Supported seven Hazardous Facility Emergency Response drills (CPCCo – 1, HMIS – 2, WTP – 3, WRPS – 1)
- o The following Emergency Management Program documents were published:
 - 100 and 200 Area Protective Action Drill (conducted April 15, 2021) final drill report submitted to DOE-RL on May 13, 2021.
 - Emergency Plan Implementing Procedures:
 - RLEP 1.1 Recognizing and Classifying Emergencies
 - RLEP 3.8 Protective Actions
 - RLEP 3.16, Hanford Plume Assessment and Tracking
 - RLEP 3.21, Emergency Action Levels
 - Emergency Action Level (EAL) Implementing Procedures:
 - Appendix 1-2.A 200 Area Tank Waste
 - Appendix 1-10.A, Hanford Site/Transportation
- o HMIS Hanford Patrol and Safeguards and Security (SAS) personnel successfully completed two Force-on-Force (FOF) exercises. These were the first full scope FOF exercises to be conducted onsite since the onset of the COVID-19 pandemic and included appropriate COVID-19 planning and controls.

- o HMIS Hanford Patrol personnel successfully completed Live-Fire Shoothouse and Tactical Obstacle Course qualifications. These qualifications were conducted in accordance with CRD O 473.3A, Chg 1 (Supp. Rev. 0), Protection Program Operations.
- o HMIS SAS staff provided the following Material Control and Accountability (MC&A) support to the Hanford site:
 - Supported CPCCo in the closure of the K Basin Material Balance Area (MBA) 107. This closure will allow for a traditional deactivation and demolition of legacy systems and structures in and around the 105KW Basin. Process have been put into place to allow the facility to handle any Remote Handled (RH) Transuranic (TRU) debris found during deactivation of the 105KW Basin.
 - Supported CPCCo in the preparation and submittal of inventory extension requests to RL for the Canister Storage Building and ISA Category I MBAs. RLs approval of these extensions significantly reduces the operational cost and risk of performing the inventories and reduces the number of required entries into the ISA Protected area.
 - received DOE-RL approval Revision 1 of the Materials Control and Accountability Plan, HMIS-PLN-SAFE-5477 on May 27, 2021. This revision incorporates the new contractors; HMIS and CPCCo with their corresponding procedure references.
- o HMIS Safeguards and Security (SAS) Master Plan was delivered to DOE-RL on May 27th. The Safeguards and Security Team organized several collaboration and information exchange sessions to identify potential challenges and opportunities as the site transitions to DFLAW operations. As a result, the plan captured 68 key proposed out-year activities forecasted for the next 10 years. The plan serves as the very first SAS master plan and establishes a project baseline for future planning purposes.
- o HMIS SAS staff updated 40 Asset Protection Agreements (APAs). The APA are a collaborative effort between Physical Security and facility staff and define the facility security assets and the protective controls in place.
- o HMIS SAS staff remotely attended the following:
 - DOE Classification Officer Annual Technical Review Meeting.
 - Security Awareness Special Interest Group monthly teleconference.
- o The Patrol Training Academy (PTA) Parking Lot Asphalt project (S-250) was completed in May. The project installed a series of rainstorm catch basins and drainage runoff system as well as curbing and asphalt, plus vehicle stripping across the entire PTA complex parking lot area. The project provides a significant safety improvement during inclement weather.
- o HMIS HFD personnel continued preparations for the 2021 wildland fire season. One small wildland fire was extinguished on-site, encompassing approximately two acres. HFD training division conducted wildland refresher training for heavy equipment and teamster personnel. Prescribed burning operations to reduce fuel loading around firebreaks and vulnerable facilities continued, and approximately 7250 cubic yards of tumbleweeds were eliminated.
- o HMIS HFD personnel from the Hanford Fire Marshal Office continued to provide documentation review and support for multiple projects, L-849/850, 200E/W water tank replacements, L-888, L-894, L-897, L-907, and L-928.

Information Management Services:

- IM Program Management
 - o Cyber Issues Management value stream mapping process completed with significant improvement opportunities identified to automate and integrate with existing issues management processes in the enterprise.
 - o Microsoft Teams has increased number of participants in meetings from 300 to 1,000 allowing for larger meetings in the existing environment, likely eliminating the need for the Microsoft Teams Live Event product.
 - o The Virtual Desktop Infrastructure (VDI) Infrastructure was successfully upgraded to Horizon 8.2 per recommendation of the vendor to support Microsoft Teams optimization efforts to improve user experience.
 - o Contract Deliverable CD0052, report of Information Technology Continuity of Operations test was successfully completed and submitted post the test being performed during a datacenter maintenance outage completed in April.
 - o The Cloud Bridging Strategy flow, procedure, and inventory developed by the Information Management System (IMS) Cybersecurity were accepted by DOE-RL and sent to HMIS management; and communicated to the Integrated Project Team (IPT). and will be presented at the IT Leadership meeting June 3rd.
 - o The IMS Cybersecurity team submitted Risk Assessment 2021-001, Small Unmanned Aircraft System Program, to DOE for acceptance of risk by the Authorizing Official.
 - o The Hanford SMS notification system was updated to continue function and to follow the latest regulations for mass text messages. One specific benefit of the update will affect all our WARNS messages coming from the same number for everyone, every time.
 - o The Systems Engineering Change Board (SECB) application had a new reporting screen feature implemented that provides immediate status of all approved and denied software/system requests at the click of a button, including explanation of decision from the SECB review board.
- Chief Information Office
 - o Contract Deliverable CD0083, plan to identify and eliminate duplicative and unnecessary redundant systems at a rate of 25% of the identified systems per year, was submitted with-a process proposal of end of life redundant applications and/or systems candidates for a multi-phased approach to retirement.
 - o Several Software Quality Assurance (SQA) system documentation updates were completed in May 2021 including:
 - iCAS DevonWay for CPCCo – Type E
 - Material Safety Data Sheets (MSDS External) for HMIS – Type F
 - Mobile Hanford (DOE) – Type F
 - Hanford Site Emergency Alerting System (HSEAS) for HMIS – Type D
 - Safety Metrics System (MSMET/HSMET) for HMIS – Type F
 - Trace 700 – HVAC Thermal Loads for HMIS – Type D
 - Radio Paging System (RPS) for HMIS – Exempt

- Hanford Baseline Change Register (HLANBCR) for HMIS – Type D
- Air Operating Permit (AOP) for HMIS – Type D
- o Contract Deliverable CD0071, 5-year Geospatial Information System (GIS) Program Plan and budget was submitted to the Department this month. Plan defines maintenance and improvements to the existing GIS and projected funding requirements needed to support the Hanford Site missions.
- o IMS completed a Hanford wide IT standards and policies report for the HMIS Chief Technology Officer (CTO) developed in the Microsoft Power BI tool. The report will provide the Hanford site guidance on IT best practices in an easily accessible and up-to-date manner.
- o IMS successfully published a new release of the procedure, HMIS-PRO-IS-309, Controlled Software Management. This release expanded some functionality for low-risk software providing owners of low-risk software more options in managing their software.
- o The IMS subcontractor team recruited additional technical staff to support WTP information systems including a new project manager, software specialist and server support specialist. The resources have been added for WTP technical and professional services work scope related to software systems and licensing.

Workforce Solutions:

On Saturday, May 8, the Workforce Resources and Development team attended and participated in a Job Fair hosted by Dan Newhouse. This annual event is for constituents from all over the 4th Congressional District. The event is a great opportunity for local and non-local job seekers to connect with potential employers, and for employers to access talent necessary to fill current and hard-to-fill job vacancies. The event was held at the 3-Rivers Convention Center in Kennewick, Washington, and it was the first in-person recruiting event attended by Hanford Mission integration Solutions since the COVID-19 pandemic.

In addition to private sector companies such as Federal Express, McDonalds and Walmart as well as representation from educational institutions such as Perry Tech Institute and Columbia Basin College, HMIS joined with other Hanford contractors such as WTP, WRPS, Framatome, and others to offer community support while assisting in connecting job seekers to employment opportunities. The event was well attended, well received, and further strengthened the relationship among HMIS' many community partners.



Job Fair hosted by Dan Newhouse

On Tuesday, May 11th the Workforce Resources & Development team hosted the HMIS Co-Op intern presentations, which are facilitated annually and feature presenters from participants in the HMIS Co-Op Intern Program. The event allows Co-Op intern participants an opportunity to share and articulate learning experiences they've had while being a part of the program. Concurrently, it's a requirement for participants in the program and offers Co-Op interns an opportunity to practice presenting to members of the HMIS leadership team. The presenters received appreciation and praise from those in attendance, including HMIS President and Chief Executive Officer (CEO).

The presentations are part of an overarching experience for Co-Op interns, and the program has successfully prepared program participants for future positions with the company. While providing a conduit for full-time opportunities, the program has simultaneously and successfully expanded inclusion, diversity, and relationships with Columbia Basin College and Washington State University.

Hanford Workforce Engagement Center (HWECC)

- Since March of 2020, COVID has created consistent hurdles for the Hanford site. The HWECC, even with COVID restrictions/social distancing, has continued assisting current workers, former workers, and family members of those workers. The HWECC has adapted its services and access to meet the needs of most parties needing assistance. The Center is utilizing phone conferencing more often yet continue to be available in person for individuals with time sensitive issues or concerns. COVID restrictions to this day are minimizing in-person services, but using current COVID guidelines for safe interaction, HWECC stats show continued interface.

**Table A-3. Hanford Workforce Engagement Center
Monthly Events – May 2021**

Monthly Event	No.
Phone calls	109
Walk-ins	17
E-mails	82
Scheduled Appointments	2
Outreach	7
Monthly Total	217
Total Since HWEC Opening	10,301

- On May 19th, 2021 HWEC Representatives virtually attended the Department of Labor’s webinar on Policy.

LEGACY BENEFITS – FERNALD WELFARE BENEFITS PLAN

- Nothing to report

LEGACY BENEFITS – MOUND WELFARE BENEFITS TRUST

- Quarterly Mound Board of Trustees Meeting:** The first quarter, plan year 2021 Mound Board of Trustees Meeting was held on May 5, 2021. The Board of Trustees Meeting included Mound health and welfare plan updates provided by the Trust’s consultant, Mercer. Mercer also presented proposed changes to the Mound benefits plan design which would provide some administrative efficiencies, as well as, some history related to administrative practices and previous challenges. The Trust also received an administrative update from the Third-Party Plan Administer, announcing their name change to LifeWorks which will become effective June 14, 2021. The Trust’s legal representative from Davis Wright Tremaine LLP, also presented legal updates related to the American Rescue Plan Act Subsidy, Families First Coronavirus Response Act (FFCRA) and Coronavirus Aid Relief and Economic Security (CARES) Act.

LEGACY BENEFITS – ROCKY FLATS WELFARE BENEFITS TRUST

- Quarterly Board of Trustees Meeting:** On May 12, 2021, the Rocky Flats Board of Trustees held its first quarter Board meeting for plan year 2021. During the meeting a new Chairperson was nominated and approved by the Board of Trustees. The Trust’s Third-Party Administrator, announced it will change its name to LifeWorks effective June 14th, 2021 to align with their purpose of improving lives and improving business. In addition, the Trust’s consultant, Mercer, proposed changing the Retiree Reimbursement Account (RRA)

assumption for ASC 715 PRB liability to align with the utilization based on historical data. A legal update was provided by Davis, Wright, Tremaine, the Trust's Employee Retirement Income Security Act (ERISA) counsel.

- **Plan Trust versus Settlor Cost Education Session:** On May 26th, 2021, Legacy Benefits staff attended a virtual education session on Trust versus Settlor (employer) costs which was provided by the Trust's counsel, Davis, Wright, Tremaine. The purpose of the presentation was to educate the staff on how to identify cost that would be deemed to be paid out of the Trust's assets when reviewing and approving vendor invoices.
- **Retiree Reimbursement Account Assumptions:** On May 27th, 2021 HMIS, on behalf of the Rocky Flats Board of Trustees, sent an advance notification letter to the DOE, Richland Operations Office to inform them of changes to the Retiree Reimbursement Account (RRA) assumptions used for reporting the Accounting Standards Codification Section 715, Post-Retirement Benefits liability. The assumption changes were proposed by the Trust's actuaries, Mercer, due to the availability of seven years of RRA utilization data since implementation. The proposed changes to the RRA assumptions for calculating the liability better aligns with the actual RRA utilization rates. The Board of Trustee's reviewed Mercer's analysis and voted to implement this change in the next reporting cycle. This change is estimated to result in a reduction of long-term liability by approximately \$12 million (4.5%) as of 10/1/2020.
- Upcoming events:
 - o June 2021 - A member of Workforce Engagement and Legacy Benefits will complete the certification process to become a Six Sigma Green Belt.
 - o June 2021 - A member of Workforce Engagement and Legacy Benefits will complete the process to become a certified Buyer's Technical Representative.
 - o The Workforce Solutions team has finalized a new performance appraisal process and plans to roll out the communications and form the first part of June. The new performance appraisals are to be completed by the end of July 2021.

HMIS benefit team has worked extensively to coordinate the data transfer, reporting and business processes necessary to maintain the Employees in the Hanford Employee Welfare Trust, Hanford Site Savings Plan and Hanford Site Pension Plan programs.

On May 5, 2021, Workforce Solutions successfully negotiated a Memorandum of Agreement (MOA) for special weekend shifts, for janitorial services, with the Hanford Atomic Metal Trades Council and International Union of Operating Engineers, Local 280. This MOA provides HMIS with the ability to provide seven (7) days per week custodial coverage for the Hanford Site. The negotiated special weekend shifts will decrease overtime costs, provide the additional coverage necessary to support facility owners during the ongoing COVID-19 pandemic, provide support to thirty-nine (39) additional customer facilities and meet customer expectations for seven (7) day per week coverage.

- Engineering
 - o A meeting of the One Hanford Integrated Engineering Forum was held on May 17, 2021, with engineering participants from HMIS, CPPCo, and WRPS. Topics discussed included pending implementation direction associated with CRD O 420.1C, Chg 3; a new hydraulics design guide developed by WRPS, and the correspondence sent from the HMIS Chief Operating Officer to the OHCs regarding the path forward for resolving the NFPA-13 return bends compliance issue prior to the completion of Projects L-781 and L-826. The next scheduled meeting of the Forum will be held in July 2021.
 - o Project L-612. Engineering and Electrical Utilities Operations personnel performed planning activities associated with the performance of comprehensive condition assessment of the north loop the electrical distribution system. This activity supports a change in direction for the performance for Project L-612. The statement of work for acquiring subcontracted expertise was issued for bids in May and due to no bids received, the procurement was adjusted and re-issued to a broader pool of vendors. Also associated with this Project, HMIS-ENG-66027, *Engineering Analysis of Alternative Options to Project L-612, 230 kV Transmission System Reconditioning and Sustainability*, Revision 1, was issued during this reporting period.
 - o Alternate Heating for 200 Area Fire Station: Engineering continued activities to assess the available alternatives to upgrade the heating system supporting the 300 Area fire station. A list of options was developed and presented to senior management during the reporting period. Detailed work planning continued in May to develop necessary additional details and initiate procurement of necessary materials and equipment. Results of the Plant Forces Work Review (PFWR) are expected in early June 2021.
 - o Code Compliance Associated with Projects L-849 and L-850: HNF-66175, *NFPA 22-2018 Equivalency for Pipe Materials*, was developed and issued to support Projects L-849 and L-850. This equivalency provides the technical rationale for why the selection of polyvinyl chloride (PVC) piping provides an equivalent level of safety to the prescriptive code requirements that would require an alternate material selection. This equivalency was approved by the HMIS Authority Having Jurisdiction and was transmitted for DOE approval via letter number HMIS-2100984 on April 27, 2021. DOE approved this equivalency via letter 21-NSD-001602 on May 24, 2021.
 - o HNF-66648, *623B Building Power Alternatives Analysis*, Revision 0, was issued to document the engineering evaluation that was performed to assess the electrical needs of communications equipment that will remain on Gable Mountain.
- Technology & Enterprise Architecture
 - o CD0066 – Monthly CPIC Exhibit 53 and Exhibit 300 for IT Investments was completed on time and submitted to DOE.
 - o CD0065 – Sitewide IT Standards and Procedures was approved by IT Governance Advisory Board, and submitted to DOE on May 20, 2021.
 - o CD0069 – Enterprise Architecture Management Program Plan was issued and submitted to DOE on May 13, 2021.

2.0 MAJOR ISSUES

Nothing to report.

3.0 PROGRAM RISK ASSESSMENT

The HMIS program risk assessments are outlined in the following subsections.

3.1 HMIS I&SS Mission Key Risks

- **BCRs:** No BCRs were processed in May that impact the project's MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in May.
- **Current Risk Posture:**





Table A-4. I&SS Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	6	0	0	0	33
May	0	6	0	0	0	33





Table A-5. I&SS Key Risks

	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
EU- Mission Risks																			
Explanation of major changes to the program monthly spotlight chart: No major changes to the Spotlight Charts in May .																			
Realized Risks (Risks that are currently impacting project cost/schedule)																			
No Realized Risks in May .																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																			
No Critical Risks in May .																			
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
EU-0003-T: Substation Transformer Failure Legacy Risk #: 1200 & PWEU-0003-T	If any of the four substation transformers fails, OHC operations may be impacted, and additional costs may be incurred. Risk Handling Strategy: Mitigate Probability: Unlikely (10%) Worst Case Impacts: \$6,000K, 0 Days	<div><div></div><div></div></div>	<div><div></div><div></div></div>	Risk Trigger: Degradation of transformers lead to transformer failure. <table><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Repair 451B transformer.</td><td>TBD</td><td>0</td></tr><tr><td>Plan and perform preventative and corrective maintenance</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Replace transformers when warranted.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conduct system prioritization evaluation</td><td>TBD</td><td>0</td></tr></tbody></table> Mitigation Action Assessment: No major changes in the month of May . A9 substation continues to be monitored with no indications of potential failure. 451B Transformer LTC leak has been stopped, re-drafting statement of work for repair effort. Repairs forecasted to start in July.	Mitigation Action(s)	FC Date	%	Repair 451B transformer.	TBD	0	Plan and perform preventative and corrective maintenance	Ongoing	N/A	Replace transformers when warranted.	Ongoing	N/A	Conduct system prioritization evaluation	TBD	0
Mitigation Action(s)	FC Date	%																	
Repair 451B transformer.	TBD	0																	
Plan and perform preventative and corrective maintenance	Ongoing	N/A																	
Replace transformers when warranted.	Ongoing	N/A																	
Conduct system prioritization evaluation	TBD	0																	



SECTION A

	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
WSU- Mission Risks													
Explanation of major changes to the program monthly spotlight chart: No major changes in May.													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No Realized Risks in May.													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)													
WSU-0006-T: 283W Water Treatment Facility Water Production limitation Legacy Risk #: 1526 & PWWSU-0006-T	If the 283W Water Treatment Facility cannot produce enough potable water for the Hanford Site because of the 1,500gpm permit limitations, then potable water production demands will not be met, causing impacts to cleanup schedules or shutdown of certain Hanford site operations. Risk Handling Strategy: Avoid Probability: Likely (80%) Worst Case Impacts: \$0K, 0 Days			Risk Trigger: 283W WTF cannot produce enough potable water for the Hanford Site. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Completion of L-897 200 Area Water Treatment Plant (DFLAW Essential)</td><td>FY2022</td><td>30</td></tr></table> Mitigation Action Assessment: Project L-897, Central Plateau Water Treatment Plant (DFLAW Essential), is scheduled for completion FY2022. This will reduce the likelihood of not being able to produce enough potable water for the Hanford Site. If DFLAW commissioning activities commence prior to the commissioning of the new CPWTF, then operational controls of the distribution of sanitary water from the existing 283W clearwells will be put into place, including: <ul style="list-style-type: none">Limiting flow out of the clearwell to 1,200gpmUtilizing available storage reservoirs at 283E, 283EA and 283WA to supplement sanitary water peak demandsAdministratively control or limit non-essential potable water demands such as irrigation water supply These activities are discussed in HNF-64684, 200W Sanitary Water System Capacity Evaluation. In May, construction contractor completed development of premobilization submittals and continued long lead submittals and procurements. The construction Kick-ff meeting was held on 5/20 and terms & conditions negotiations for the HMIS membrane filters and treatment system procurement continued. HMIS new lower procurement notification thresholds, and negotiations of Terms and Conditions are driving a projected delay in Membrane Contract award and downstream install activities.	Mitigation Action(s)	FC Date	%	Completion of L-897 200 Area Water Treatment Plant (DFLAW Essential)	FY2022	30			
Mitigation Action(s)	FC Date	%											
Completion of L-897 200 Area Water Treatment Plant (DFLAW Essential)	FY2022	30											
WSU-0020-T: TEDF Failure impacts discharge of waste water Legacy Risk #: 3175 & PWWSU-0020-T	If HMIS Water Utilities (WU) is unable to discharge wastewater from the 283W Water Treatment Facility (WTF) or new Central Plateau Water Treatment Facility (CPWTF) due to an extended failure of the TEDF discharge line or lift station, then the ability to produce potable water for the Hanford Site will be impacted, causing potential site wide water outages, impacting cleanup operations and fire suppression requirements for the Hanford Site. Risk Handling Strategy: Accept Probability: Somewhat Likely (50%) Worst Case Impacts: \$15,000K, 0 Days			Risk Trigger: WU is unable to discharge wastewater due to an extended failure of TEDF. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Ongoing communication with WRPS during their performance of emergency repairs to the lift station</td><td>Ongoing</td><td>NA</td></tr><tr><td>Use 3,000 gallon water trucks to haul wastewater to TEDF</td><td>As Needed</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May. Rely on WRPS to perform emergency repairs of the lift station in the event of failure. Ongoing discussions with DOE-RL to implement an emergency provision that includes using 3,000 gallon water trucks to haul wastewater to TEDF. The current analysis recognizes there are up to five days of waste water holding capabilities before needing to use water trucks or find an alternative means of wastewater diversion.	Mitigation Action(s)	FC Date	%	Ongoing communication with WRPS during their performance of emergency repairs to the lift station	Ongoing	NA	Use 3,000 gallon water trucks to haul wastewater to TEDF	As Needed	NA
Mitigation Action(s)	FC Date	%											
Ongoing communication with WRPS during their performance of emergency repairs to the lift station	Ongoing	NA											
Use 3,000 gallon water trucks to haul wastewater to TEDF	As Needed	NA											

SECTION A

	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
WSU- Mission Risks													
WSU-0021-T: Water Line Failure under TSCR Pad Legacy Risk #: 3176 & PWWSU-0021-T	If the 12" raw water line running under the proposed Tank Side Cesium Removal (TSCR) pad fails due to increased heavy traffic, then looped raw water supply to the 200E tank farms (TF) and fire suppression systems will be impacted for extended periods of time, causing operations to enter into Limited Condition of Operations (LCOs). Risk Handling Strategy: Avoid Probability: Likely (75%) Worst Case Impacts: \$750K, 0 Days			Risk Trigger: The raw water line located under the proposed TSCR pad fails due to increased heavy traffic. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Install a new raw water line routed around the proposed location of TSCR and associated waste transfer lines or paths of heavy equipment travel. (L-928)</td><td>FY2023</td><td>0</td></tr><tr><td>Perform ERMA corrective maintenance waterline repairs while management exploits scheduling/personnel efficiencies where able.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Project L-928, Re-Route 12" Raw Water Line Near 241AP Farm (TSCR) (DFLAW Priority), has a completed draft SOW and initiated review. Planning is forecasted to be complete 07/2021. This will avoid a potential raw water line break. TSCR pad operational date is forecasted for September 2021 increasing the likelihood of a water line failure.	Mitigation Action(s)	FC Date	%	Install a new raw water line routed around the proposed location of TSCR and associated waste transfer lines or paths of heavy equipment travel. (L-928)	FY2023	0	Perform ERMA corrective maintenance waterline repairs while management exploits scheduling/personnel efficiencies where able.	Ongoing	NA
Mitigation Action(s)	FC Date	%											
Install a new raw water line routed around the proposed location of TSCR and associated waste transfer lines or paths of heavy equipment travel. (L-928)	FY2023	0											
Perform ERMA corrective maintenance waterline repairs while management exploits scheduling/personnel efficiencies where able.	Ongoing	NA											
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
WSU-0016-T: PFP Contamination Reaches 283W Water Treatment Facility Legacy Risk #: 1955 & PWWSU-0016-T	If Plutonium Finishing Plant (PFP) radiological contamination reaches the 283W Water Treatment Facility, water purveyance abilities to 200W Area will be impacted resulting in sanitary and raw water supply shutdowns to 200W and 200E Area buildings. Risk Handling Strategy: Accept Probability: Unlikely (20%) Worst Case Impacts: 0 days, \$15.0M			Risk Trigger: During PFP demolition, PFP radiological contamination reaches the 283W WTF prompting water supply shutdown to 200W and 200E areas. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>No mitigation actions planned at this time.</td><td>N/A</td><td>N/A</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . No mitigation actions are currently identified. Risk will continue to be monitored throughout the remainder of the PFP mission. CHPRC is performing D&D activity for PFP project with a forecasted completion of FY2021. The PFP Closure Project team resumed demolition activities. The last remaining steam line associated with 234-5Z was size reduced and loaded out, officially completing the demolition of the PFP main processing facility. Disposal of Plutonium Reclamation Facility (PRF) rubble pile is underway, once complete the risk can be evaluated for closure.	Mitigation Action(s)	FC Date	%	No mitigation actions planned at this time.	N/A	N/A			
Mitigation Action(s)	FC Date	%											
No mitigation actions planned at this time.	N/A	N/A											
	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
MMP- Mission Risks													
Explanation of major changes to the program monthly spotlight chart: No major changes in May .													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No Realized Risks in May .													

SECTION A

	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
WSU- Mission Risks																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																			
MMP-0001-T: Roof and HVAC Operating in Degraded State Legacy Risk #: 2073 & RES- 0002-T	If sitewide roof and HVAC units continue to operate in a state of degradation because they are currently operating past their 20-year design life, then further deterioration will continue at an increasing rate resulting in impacts to mission critical support functions and poor occupant working conditions. Risk Handling Strategy: Avoid Probability: Somewhat Likely (70%) Worst Case Impacts: \$15,000K, 0 days			Risk Trigger: HVAC units fail before being replaced. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Replace end of design life roof. Project L-796</td><td>FY2021</td><td>0</td></tr><tr><td>Replace end of design life roof. Project L-914</td><td>FY2022</td><td>0</td></tr><tr><td>Replace end of design life HVAC units. Project L-915</td><td>FY2022</td><td>0</td></tr><tr><td>Perform routine inspections and maintenance, including minor repairs as needed and as able.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Projects L-796, L-914, and L-915 are scheduled to replaced roofs and HVAC units. The completion of the projects will reduce the likelihood of roof leaks and HVAC failures. In May , for L-796, construction contractor initiated mobilization to MO-285 and initiated work. Once MO-285 is complete construction will progress to MO-414. Project forecasted for completion FY2022.	Mitigation Action(s)	FC Date	%	Replace end of design life roof. Project L-796	FY2021	0	Replace end of design life roof. Project L-914	FY2022	0	Replace end of design life HVAC units. Project L-915	FY2022	0	Perform routine inspections and maintenance, including minor repairs as needed and as able.	Ongoing	NA
Mitigation Action(s)	FC Date	%																	
Replace end of design life roof. Project L-796	FY2021	0																	
Replace end of design life roof. Project L-914	FY2022	0																	
Replace end of design life HVAC units. Project L-915	FY2022	0																	
Perform routine inspections and maintenance, including minor repairs as needed and as able.	Ongoing	NA																	
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
No High Risks in May .																			



3.2 HMIS I&IS Mission Key Risks

- **BCRs:** No BCRs were processed in May that impact the project's MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in May.
- **Current Risk Posture:**

Table A-6. I&IS Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	3	0	0	0	13
May	0	3	0	0	0	13

Table A-7. I&IS Key Risks

	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
I&IS- Mission Risks																			
Explanation of major changes to the program monthly stoplight chart: No major changes to the Stoplight Charts in May.																			
Realized Risks (Risks that are currently impacting project cost/schedule)																			
No Realized Risks in May.																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																			
FLT-0007-O: New Fleet Facility risk avoidance Legacy Risk #: 1747 and SSIM-0013--O	If HMIS is budgeted and approved to build a new Fleet facility, then risks associated with maintaining and operating the current 2711E Fleet Equipment Maintenance Shop can be closed resulting in greatly reduced risk exposure and higher level of work efficiency Risk Handling Strategy: Exploit Probability: Likely (75%) Worst Case Impacts: \$0, 0 days			<p>Risk Trigger: A new fleet shop complex is designed and constructed. Operations at the new fleet shop complex will mitigate four existing risks.</p> <table border="1"><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Complete a Fleet Services Facility Master Plan to determine the long term goal of the fleet program</td><td>Complete</td><td>100</td></tr><tr><td>Identify a facility design that accommodates all electrical and safety needs for long-term fleet service's needs (L-907).</td><td>FY2022</td><td>0</td></tr><tr><td>Complete project L-908, Auto/Truck Shop and Storage, based on L-907 design.</td><td>FY2024</td><td>0</td></tr><tr><td>Complete project L-909, Heavy Equipment Shop and Storage based on L-907 design.</td><td>FY2025</td><td>0</td></tr></tbody></table> <p>Mitigation Action Assessment: No major changes in the month of May. BCR VMSA-20-027 was approved on 24 February 2020 for \$24.1K towards conceptual design on L-907 within the PMB. Project L-907 will design the fleet shop complex and current projects L-908 & L-909 will see the construction of the fleet shop complex; exploiting this opportunity. Design contract awarded 1/25/2021. Fleet operations has developed a higher-efficiency layout. Implementation of this layout results in additional work for A/E, so some schedule slippage is being realized. 30% design package is due 9/13/2021. 30% design package due date revised to align with A/E deliverable schedule.</p>	Mitigation Action(s)	FC Date	%	Complete a Fleet Services Facility Master Plan to determine the long term goal of the fleet program	Complete	100	Identify a facility design that accommodates all electrical and safety needs for long-term fleet service's needs (L-907).	FY2022	0	Complete project L-908, Auto/Truck Shop and Storage, based on L-907 design.	FY2024	0	Complete project L-909, Heavy Equipment Shop and Storage based on L-907 design.	FY2025	0
Mitigation Action(s)	FC Date	%																	
Complete a Fleet Services Facility Master Plan to determine the long term goal of the fleet program	Complete	100																	
Identify a facility design that accommodates all electrical and safety needs for long-term fleet service's needs (L-907).	FY2022	0																	
Complete project L-908, Auto/Truck Shop and Storage, based on L-907 design.	FY2024	0																	
Complete project L-909, Heavy Equipment Shop and Storage based on L-907 design.	FY2025	0																	

SECTION A

	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
I&IS- Mission Risks																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
FLT-0006-T: Leak detection failure at fuel station leads to environmental impacts. Legacy Risk #: 1783 & SSIM-0008-T	If leak detection equipment is no longer serviceable due to system degradation, then petroleum, oil and lubricant (POL) leaks into the soil could occur without HMIS knowledge potentially impacting ground soil and surrounding environment. Risk Handling Strategy: Avoid Probability: Somewhat Likely (33%) Worst Case Impacts: \$70,000, 0 days			Risk Trigger: Leak detection equipment fails from age, resulting in leaks of oil and lubricant (POL) into the soil. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Replace fuel station with project L-923, Replace 200E Area Fuel Station.</td><td>FY2026</td><td>0</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Mitigation action in place to avoid the leak detection equipment failure risk by completing reliability project L-923, Replace 200E Area Fuel Station. L-923 is on the FY20 RPIP for FY26.	Mitigation Action(s)	FC Date	%	Replace fuel station with project L-923, Replace 200E Area Fuel Station.	FY2026	0						
Mitigation Action(s)	FC Date	%														
Replace fuel station with project L-923, Replace 200E Area Fuel Station.	FY2026	0														
RDS-0002-T: 2S and 11A Risk of Failure Legacy Risk #: 1832 & PWRDS-0002-T	If routes 2S and 11A remain at risk of failure, then there is a potential loss of construction truck ingress/egress and alternate site evacuation route. Risk Handling Strategy: Mitigate Probability: Likely (90%) Worst Case Impacts: \$13,473K, 0 Days			Risk Trigger: Age and past weather conditions have led to continued degradation of roads. Continued degradation and future demand future traffic needs not being met would lead to risk being realized. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Conduct 2S/4S road study.</td><td>Complete</td><td>100</td></tr><tr><td>Complete Roads Master Plan that provides a basis of when these particular routes are planned to be addressed beyond maintenance activities.</td><td>FY2022</td><td>10</td></tr><tr><td>Increase/accelerate maintenance on roads. (Crack seal, pothole repairs, shoulder repairs, etc.)</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Road study recommended that the roads should be in 2-lane configuration. Scope statement submitted for Reliability Project – L-941. Road projects will be reprioritized by DOE and identified by Reliability Project Task Order. Roads Master Plan update is now a contract deliverable (CD-0013) actively being revised to meet 6/1/2021 due date.	Mitigation Action(s)	FC Date	%	Conduct 2S/4S road study.	Complete	100	Complete Roads Master Plan that provides a basis of when these particular routes are planned to be addressed beyond maintenance activities.	FY2022	10	Increase/accelerate maintenance on roads. (Crack seal, pothole repairs, shoulder repairs, etc.)	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Conduct 2S/4S road study.	Complete	100														
Complete Roads Master Plan that provides a basis of when these particular routes are planned to be addressed beyond maintenance activities.	FY2022	10														
Increase/accelerate maintenance on roads. (Crack seal, pothole repairs, shoulder repairs, etc.)	Ongoing	NA														
Unassigned Risks (Pending ownership of identified risks/opportunities)																
No Unassigned Risks in May .																



3.3 HMIS MA Mission Key Risks

- **BCRs:** No BCRs were processed in May that impact the project's MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in May.
- **Current Risk Posture:**

Table A-8. MA Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	1	0	0	1	18
May	0	1	0	0	1	18

Table A-9. MA Key Risks

	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
MISSION ASSURANCE- Mission Risks													
Explanation of major changes to the program monthly spotlight chart: No major changes to the Spotlight Charts in May .													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No Realized Risks in May .													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)													
No Critical Risks in May .													
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
MA-0019-T: Building 6266 HVAC failure. Legacy Risk #: 1856 & ESHQ-0019-T	If the 6266 Building HVAC system experiences a complete failure, then HMIS is at risk of operational degradation in providing radiological instrument calibration and dosimetry services to the Hanford site. Risk Handling Strategy: Mitigate Probability: Likely (75%) Worst Case Impacts: \$1,461K, 0 Days			Risk Trigger: The 6266 building is currently running on backup compressor because the primary has failed. Every quarter, an outage of 2-3 days occurs and if lack of resources or parts is encountered and an outage lasted longer than 3 days it would be critical and force a move. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Process dosimeters at 805 Goethals and PNNL as needed.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Complete construction phase of Project L-797, Key Facilities HVAC Replacements.</td><td>FY21</td><td>0</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Alternatives analysis conducted; awaiting prospective bids from contractors before project is awarded to replace the HVAC system. Bids are scheduled to be completed by the end of summer 2021 and the project is scheduled for 2021. Some dosimeters could be processed at 805 Goethals and PNNL to provide equipment calibration services, but those alternatives are highly inefficient.	Mitigation Action(s)	FC Date	%	Process dosimeters at 805 Goethals and PNNL as needed.	Ongoing	NA	Complete construction phase of Project L-797, Key Facilities HVAC Replacements.	FY21	0
Mitigation Action(s)	FC Date	%											
Process dosimeters at 805 Goethals and PNNL as needed.	Ongoing	NA											
Complete construction phase of Project L-797, Key Facilities HVAC Replacements.	FY21	0											
Unassigned Risks (Pending ownership of identified risks/opportunities)													
MA-0005-T: Unreadable Records from Radiological Exposure Legacy Risk #: 1465 & ESHQ-0005-T	If Radiological Exposure records become unreadable, then HMIS would be unable to provide these records in support of EEOICP/FOIA and Privacy Act requests. The maintenance of these records is also a regulatory requirement and the inability to sustain them is a direct breach of a federal requirement. Radiological record retention is a requirement of 10 CFR 830 & 835. HMIS Comment: No major changes in May . Current handling of the records has been reduced to an as needed basis to reduce degradation. Digitization and indexing is not currently included in the HMIS scope and is being performed by ITG directly through DOE. HMIS is not contractually impacted by the penalties under the EEOICPA.												

3.4 HMIS SES Mission Key Risks

- **BCRs:** No BCRs were processed in May that impact the project's MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in May.
- **Current Risk Posture:**

Table A-10. SES Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	4	0	0	1	8
May	0	4	0	0	1	8

Table A-11. SES Key Risks

	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
SES - Mission Risks													
Explanation of major changes to the program monthly stoplight chart: No major changes to the Stoplight Charts in May .													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No Realized Risks in May .													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)													
SES-0012-T: Fire, Medical, Security, and Emergency communication could fail if emergency radios and supporting site infrastructure fail. Legacy Risk #: 1959 & ES-0012-T	If Emergency Radios and supporting site infrastructures fail because they're outdated and no longer supported for repair by the manufacturer, then Fire, Medical, Security, and Emergency communication will be impacted, delaying their response to the Hanford site. Risk Handling Strategy: Avoid Probability: Somewhat likely (40%) Worst Case Impacts: \$0, 0 Days	<div><div></div><div></div></div>	<div><div></div><div></div></div>	Risk Trigger: Hardware/software that is no longer supported fails and cannot be repaired by the manufacturer. <table><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Replace hand-held radios for Fire, Patrol, and Emergency Management (Project L919-7040).</td><td>07/2021</td><td>0</td></tr><tr><td>Replace repeaters and site infrastructure that supports the Hanford site emergency radio system (Project L919-7140).</td><td>08/2021</td><td>0</td></tr></tbody></table> Mitigation Action Assessment: No major changes in the month of May . Project L-919 will avoid this risk. Questions from contracts regarding the proposal prompted a request for a revised proposal answering those questions. Award was expected in the June 2020 reporting period. The questions raised during the review ultimately led to the decision to not award the contract under the current requisition. The vendor, Wildflower, will not be used for the procurement unless pricing for labor and services can be verified. The SOW was split in two phases: one for design/configuration services & one for installation of radios and radio system core (construction contract). The services procurement contract was awarded 9/30/2020. Construction contract SOW was approved and posted. The award date of the construction contract has been delayed for several months for many reasons, including construction contract determination, approvals for job walk and HMIS template transition. Upon detailed review of the SOW, it was determined that design was not to the point that would support a Firm Fixed Price bid and the RFP was canceled. RFP will be re-issued following further development of the design and Bill of Materials. Delays awarding the installation contract and the materials procurement continue to push back activity L919-7140 to install repeaters and site infrastructure. The Project expects to recover all variance upon completion of award of the new contracts, which is expected in Fiscal Month August.	Mitigation Action(s)	FC Date	%	Replace hand-held radios for Fire, Patrol, and Emergency Management (Project L919-7040).	07/2021	0	Replace repeaters and site infrastructure that supports the Hanford site emergency radio system (Project L919-7140).	08/2021	0
Mitigation Action(s)	FC Date	%											
Replace hand-held radios for Fire, Patrol, and Emergency Management (Project L919-7040).	07/2021	0											
Replace repeaters and site infrastructure that supports the Hanford site emergency radio system (Project L919-7140).	08/2021	0											

SECTION A

	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
SES - Mission Risks																
SESHFES-0011-T: HFD responses into PFP's RBA may result in contaminated equipment and apparatus. Legacy Risk #: 1972 & ES-0014-T	If there is a Hanford Fire Department (HFD) emergency response to the PFP radiological buffer area for a fire, hazmat or medical event there may be a significant potential for HFD material as well as apparatus to be contaminated, thereby losing that equipment and/or apparatus for use elsewhere on the Hanford site. Risk Handling Strategy: Accept Probability: Unlikely (25%) Worst Case Impacts: \$3,000K, 0 Days			Risk Trigger: Emergency response to PFP radiological buffer area for a fire, hazmat or medical event. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Develop strategies to minimize the opportunity to contaminate Emergency Services apparatus and equipment.</td><td>Complete</td><td>100</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Response strategies have been developed to minimize contamination of Emergency Services apparatus and equipment. As PFP progress continues, the probability of contamination will slowly reduce. This risk will continue to be monitored as PFP progresses through its mission.	Mitigation Action(s)	FC Date	%	Develop strategies to minimize the opportunity to contaminate Emergency Services apparatus and equipment.	Complete	100						
Mitigation Action(s)	FC Date	%														
Develop strategies to minimize the opportunity to contaminate Emergency Services apparatus and equipment.	Complete	100														
SES-0025-T: Response into a radio dead-zone. Legacy Risk #: ES-0025-T	If Emergency Response Personnel cannot communicate with each other or a controlling agency because radio communication is unavailable, then response into or operating in an unknown environment will potentially impact the health and safety of those responders. Risk Handling Strategy: Avoid Probability: Likely (75%) Worst Case Impacts: \$0, 0 Days			Risk Trigger: Emergency response to dead-zone or signal shadow on site where responders lose radio communication. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Install signal repeaters at identified dead-zones and signal shadows on site.</td><td>TBD</td><td>0</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Avoid. Install signal repeaters at identified dead-zones and signal shadows within WTP. Signal repeaters would need to be established as permanent equipment that is reliable in all-weather environments and available 24/7. Signal repeaters must be compatible with existing and anticipated equipment. A work order to install the repeaters is in process, but there is no forecast completion date at this time.	Mitigation Action(s)	FC Date	%	Install signal repeaters at identified dead-zones and signal shadows on site.	TBD	0						
Mitigation Action(s)	FC Date	%														
Install signal repeaters at identified dead-zones and signal shadows on site.	TBD	0														
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
SESHFES-0006-T: Catastrophic failure of utilities or structure leaves a Hanford fire station uninhabitable. Legacy Risk #: 1727 & ES-0006-T	If a Hanford fire station (100/200/300 areas) becomes uninhabitable for fire and medical responders due to a catastrophic failure of utilities or structure then responders and apparatus will need to be relocated increasing response times to incidents. Risk Handling Strategy: Mitigate Probability: Unlikely (20%) Worst Case Impacts: \$20,000K, 0 Days			Risk Trigger: Catastrophic failure of utilities or structure of one or more of the three Hanford fire stations. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Electrical systems have been updated once, backup generators installed to support facilities.</td><td>Complete</td><td>100</td></tr><tr><td>Supplemental window air conditioners are used.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Complete project L-888 400 Area Fire Station</td><td>05/2023</td><td>10</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Several supplemental window air conditioners were installed at the 300 area fire station in July. Power fluctuations in the 300 area fire station required corrective maintenance on internal electrical equipment in August 2020. Environmental considerations are being monitored at all three facilities. All three facilities are manned 24/7 with little modifications past their original design and construction, including 1960's commonly used building materials. Electrical systems have been updated once, backup generators installed to support facilities. Supplemental window air conditioners are used and one roof was repaired fall 2019. Project L-888, 400 Area Fire Station will partially mitigate this risk. L-888 Construction RFP was put on hold; cannot obtain pricing until DOE-RL issues the L-888 Task Order (RPTO-009) to HMIS. The construction services requisition is placed back to pending. More project specific information can be found within the L-888 stoplight.	Mitigation Action(s)	FC Date	%	Electrical systems have been updated once, backup generators installed to support facilities.	Complete	100	Supplemental window air conditioners are used.	Ongoing	NA	Complete project L-888 400 Area Fire Station	05/2023	10
Mitigation Action(s)	FC Date	%														
Electrical systems have been updated once, backup generators installed to support facilities.	Complete	100														
Supplemental window air conditioners are used.	Ongoing	NA														
Complete project L-888 400 Area Fire Station	05/2023	10														
Unassigned Risks (Pending ownership of identified risks/opportunities)																
No Unassigned Risks in May .																



3.5 HMIS IMS Mission Key Risks

- **BCRs:** No BCRs were processed in May that impact the project's MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in May.
- **Current Risk Posture:**

Table A-12. IMS Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	9	0	0	0	12
May	0	9	0	0	0	17

Table A-13. IMS Key Risks

	Unmitigated Risk Impacts	Assessment		Comments																																	
		Month	Trend																																		
IMS- Mission Risks																																					
Explanation of major changes to the program monthly spotlight chart: No major changes to the Stoplight Charts in May.																																					
Realized Risks (Risks that are currently impacting project cost/schedule)																																					
No Realized Risks in May.																																					
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																																					
IMS-0003-T: Unaware of Network Intrusion Legacy Risk #: 1206 & InfoM-0003-T	If HMIS is unaware of an ongoing intrusion into the network, due to an inability to detect the intruder, then a significant information compromise will occur. Risk Handling Strategy: Mitigate Probability: Somewhat Likely (50%) Worst Case Impacts: \$2.0M, 0 Days			Risk Trigger: During day to day operations, an intrusion to the network is experienced.																																	
				<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Increase staff by 2 FTEs for incident response and analysis.</td><td>Complete</td><td>100</td></tr><tr><td>Integrate network operations center with engineering and cyber security to form security operations center.</td><td>Complete</td><td>100</td></tr><tr><td>Improve internal controls, auditing, monitoring, and alerting capabilities.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Incident detection and log correlation tools have been improved, activity ongoing.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Review incident handling guidelines and implement appropriate recommendations.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Develop incident scenarios and perform exercises regularly.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Provide additional training on security tools to existing staff.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Improved incident response and analysis capability.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Use outside resources to expedite improvements.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Implement XSOAR Automation Software</td><td>04/2021</td><td>98%</td></tr></table>	Mitigation Action(s)	FC Date	%	Increase staff by 2 FTEs for incident response and analysis.	Complete	100	Integrate network operations center with engineering and cyber security to form security operations center.	Complete	100	Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA	Incident detection and log correlation tools have been improved, activity ongoing.	Ongoing	NA	Review incident handling guidelines and implement appropriate recommendations.	Ongoing	NA	Develop incident scenarios and perform exercises regularly.	Ongoing	NA	Provide additional training on security tools to existing staff.	Ongoing	NA	Improved incident response and analysis capability.	Ongoing	NA	Use outside resources to expedite improvements.	Ongoing	NA	Implement XSOAR Automation Software	04/2021	98%
				Mitigation Action(s)	FC Date	%																															
				Increase staff by 2 FTEs for incident response and analysis.	Complete	100																															
				Integrate network operations center with engineering and cyber security to form security operations center.	Complete	100																															
				Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA																															
				Incident detection and log correlation tools have been improved, activity ongoing.	Ongoing	NA																															
				Review incident handling guidelines and implement appropriate recommendations.	Ongoing	NA																															
				Develop incident scenarios and perform exercises regularly.	Ongoing	NA																															
				Provide additional training on security tools to existing staff.	Ongoing	NA																															
				Improved incident response and analysis capability.	Ongoing	NA																															
				Use outside resources to expedite improvements.	Ongoing	NA																															
Implement XSOAR Automation Software	04/2021	98%																																			
Mitigation Action Assessment: No major changes in the month of May. Internal process improvements continue to be conducted to improve monitoring and alerting. In house training is ongoing to improve incident response and user awareness. Administrative controls are employed to prevent introduction of malware into the network. In May, SQA documentation was completed. The Production Readiness Review Board (PRRB) documentation is being prepared. XSOAR is forecasted to be in production by 06/30/2021.																																					







SECTION A

<div>IMS-0011-T: Industrial Control System Breach.</div> <div>Legacy Risk #: 1753 & InfoM-0011-T</div>	<div>If the Industrial Control System (ICS) is breached due to an external attack or through a user's inadvertent or intentional download of malicious software, then significant and potentially catastrophic (depending on the criticality of the ICS, such TFLAN) system failure or damage may occur, including (1) loss of availability of the ICS / loss of production processes; (2) data leakage / loss of sensitive information; (3) physical damage to facilities or critical infrastructure; (4) interference with safety systems; (5) deterioration of ICS process controls; and (6) loss of life.</div> <div>Risk Handling Strategy: Mitigate</div> <div>Probability: Likely (75%) Worst Case Impacts: \$2.0M, 0 Days</div>	<div></div> <div></div>	<div></div> <div></div>	<div>Risk Trigger: During day to day operations, an intrusion to the ICS network is experienced.</div> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Conduct needs assessments for critical ICS.</td><td>Complete</td><td>100</td></tr><tr><td>Conduct needs assessments for critical ICS.</td><td>Complete</td><td>100</td></tr><tr><td>Secure access to wired and wireless networks within the ICS environment.</td><td>CY2021</td><td>30</td></tr><tr><td>Implement ICS security procedures and governance.</td><td>CY2021</td><td>15</td></tr><tr><td>Perform STE on first candidate system.</td><td>11/2021</td><td>25</td></tr><tr><td>Implement comprehensive ICS change management.</td><td>06/2022</td><td>10</td></tr><tr><td>Disable use of portable media where possible.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Implement procedures for approval of all portable devices prior to connection to the ICS network and components.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Disallow Internet and remote accesses to the ICS environment.</td><td>Ongoing</td><td>NA</td></tr></table> <div>Mitigation Action Assessment: No major changes in the month of May. In efforts to prevent a breach of the Industrial Control System (ICS), the project has implemented ongoing mitigation actions. These actions are being executed in conjunction with a heightened overall awareness of cyber security practices. In May, for the ICS mitigation action, DOE-RL is requesting a risk assessment to be developed for acceptance of the risk which will be conducted by North Wind Solutions and forecasted for completion 08/2021.</div>	Mitigation Action(s)	FC Date	%	Conduct needs assessments for critical ICS.	Complete	100	Conduct needs assessments for critical ICS.	Complete	100	Secure access to wired and wireless networks within the ICS environment.	CY2021	30	Implement ICS security procedures and governance.	CY2021	15	Perform STE on first candidate system.	11/2021	25	Implement comprehensive ICS change management.	06/2022	10	Disable use of portable media where possible.	Ongoing	NA	Implement procedures for approval of all portable devices prior to connection to the ICS network and components.	Ongoing	NA	Disallow Internet and remote accesses to the ICS environment.	Ongoing	NA
Mitigation Action(s)	FC Date	%																																
Conduct needs assessments for critical ICS.	Complete	100																																
Conduct needs assessments for critical ICS.	Complete	100																																
Secure access to wired and wireless networks within the ICS environment.	CY2021	30																																
Implement ICS security procedures and governance.	CY2021	15																																
Perform STE on first candidate system.	11/2021	25																																
Implement comprehensive ICS change management.	06/2022	10																																
Disable use of portable media where possible.	Ongoing	NA																																
Implement procedures for approval of all portable devices prior to connection to the ICS network and components.	Ongoing	NA																																
Disallow Internet and remote accesses to the ICS environment.	Ongoing	NA																																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																																		
<div>IMS-0001-T: Malicious Software Network Breach</div> <div>Legacy Risk #: 1118 & InfoM-0001-T</div>	<div>If the network is breached through a user inadvertently or intentionally downloading malicious software, then a significant outage or information compromise may occur.</div> <div>Risk Handling Strategy: Mitigate</div> <div>Probability: Unlikely (25%) Worst Case Impacts: \$2.0M, 0 Days</div>	<div></div> <div></div>	<div></div> <div></div>	<div>Risk Trigger: During day to day operations, an intrusion resulting in malicious software downloading to the network is experienced resulting in cost impacts.</div> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Replaced Palo Alto Traps with Palo Alto Cortex XDR.</td><td>Complete</td><td>100</td></tr><tr><td>Implement user behavior based anomaly detection. (Palo Alto Cortex XDR)</td><td>Complete</td><td>100</td></tr><tr><td>Project H-001, BMS Upgrade Project</td><td>FY2024</td><td>5</td></tr><tr><td>Implement application allow listing, allowing execution of only approved applications.</td><td>DOE Approval Needed</td><td>0</td></tr><tr><td>Improve internal controls, auditing, monitoring, and alerting capabilities.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Provide additional security training for users.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Restrict use of removable storage devices.</td><td>Ongoing</td><td>NA</td></tr></table> <div>Mitigation Action Assessment: No major changes in the month of May. Existing administrative processes are employed to manage system changes. In house training and lessons learned are provided to improve secure coding practice. Contracts, MOUs and ISAs are maintained. Project H-001, BMS Upgrade Project, partially mitigates this risk by reducing the number of systems potentially breached.</div>	Mitigation Action(s)	FC Date	%	Replaced Palo Alto Traps with Palo Alto Cortex XDR.	Complete	100	Implement user behavior based anomaly detection. (Palo Alto Cortex XDR)	Complete	100	Project H-001, BMS Upgrade Project	FY2024	5	Implement application allow listing , allowing execution of only approved applications.	DOE Approval Needed	0	Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA	Provide additional security training for users.	Ongoing	NA	Restrict use of removable storage devices.	Ongoing	NA						
Mitigation Action(s)	FC Date	%																																
Replaced Palo Alto Traps with Palo Alto Cortex XDR.	Complete	100																																
Implement user behavior based anomaly detection. (Palo Alto Cortex XDR)	Complete	100																																
Project H-001, BMS Upgrade Project	FY2024	5																																
Implement application allow listing , allowing execution of only approved applications.	DOE Approval Needed	0																																
Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA																																
Provide additional security training for users.	Ongoing	NA																																
Restrict use of removable storage devices.	Ongoing	NA																																

SECTION A

<div>IMS-0002-T: Application Software Vulnerability Network Breach</div> <div>Legacy Risk #: 1121 & InfoM-0002-T</div>	<div>If the network is breached due to the exploitation of vulnerabilities in installed application software, then a significant outage or information compromise may occur.</div> <div>Risk Handling Strategy: Mitigate</div> <div>Probability: Unlikely (25%)</div> <div>Worst Case Impacts: \$2.0M, 0 Days</div>	<div></div> <div></div>	<div></div> <div></div>	<div>Risk Trigger: During day to day operations, an intrusion due to network vulnerabilities is experienced resulting in cost impacts.</div> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Increase staff by 2 FTEs for incident response and analysis.</td><td>Complete</td><td>100</td></tr><tr><td>Integrate network operations center with engineering and cyber security to form security operations center.</td><td>Complete</td><td>100</td></tr><tr><td>Improve internal controls, auditing, monitoring, and alerting capabilities.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Incident detection and log correlation tools have been improved, activity ongoing.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Review incident handling guidelines and implement appropriate recommendations.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Develop incident scenarios and perform exercises regularly.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Provide additional training on security tools to existing staff, ongoing.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Improved incident response and analysis capability, increase staff by 2 FTEs.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Use outside resources to expedite improvements.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Perform vulnerability management scanning and mitigation.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Implement XSOAR Automation Software</td><td>04/2021</td><td>98%</td></tr></table> <div>Mitigation Action Assessment:</div> <div>No major changes in the month of May.</div> <div>Existing administrative processes are employed to manage system changes. In house training and lessons learned are provided to improve secure coding practice. Contracts, MOUs and ISAs are maintained.</div> <div>In May, SQA documentation was completed. The Production Readiness Review Board (PRRB) documentation is being prepared. XSOAR is forecasted to be in production by 06/30/2021.</div>	Mitigation Action(s)	FC Date	%	Increase staff by 2 FTEs for incident response and analysis.	Complete	100	Integrate network operations center with engineering and cyber security to form security operations center.	Complete	100	Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA	Incident detection and log correlation tools have been improved, activity ongoing.	Ongoing	NA	Review incident handling guidelines and implement appropriate recommendations.	Ongoing	NA	Develop incident scenarios and perform exercises regularly.	Ongoing	NA	Provide additional training on security tools to existing staff, ongoing.	Ongoing	NA	Improved incident response and analysis capability, increase staff by 2 FTEs.	Ongoing	NA	Use outside resources to expedite improvements.	Ongoing	NA	Perform vulnerability management scanning and mitigation.	Ongoing	NA	Implement XSOAR Automation Software	04/2021	98%
Mitigation Action(s)	FC Date	%																																						
Increase staff by 2 FTEs for incident response and analysis.	Complete	100																																						
Integrate network operations center with engineering and cyber security to form security operations center.	Complete	100																																						
Improve internal controls, auditing, monitoring, and alerting capabilities.	Ongoing	NA																																						
Incident detection and log correlation tools have been improved, activity ongoing.	Ongoing	NA																																						
Review incident handling guidelines and implement appropriate recommendations.	Ongoing	NA																																						
Develop incident scenarios and perform exercises regularly.	Ongoing	NA																																						
Provide additional training on security tools to existing staff, ongoing.	Ongoing	NA																																						
Improved incident response and analysis capability, increase staff by 2 FTEs.	Ongoing	NA																																						
Use outside resources to expedite improvements.	Ongoing	NA																																						
Perform vulnerability management scanning and mitigation.	Ongoing	NA																																						
Implement XSOAR Automation Software	04/2021	98%																																						
<div>IMS-0005-T: Unintended PII in Software Applications.</div> <div>Legacy Risk #: 1442 & InfoM-0005-T</div>	<div>If unintended access to Personally Identifiable Information (PII) is discovered in software applications or files, because information was not originally marked as PII, then corrections must be implemented, resulting in cost impacts.</div> <div>Risk Handling Strategy: Mitigate</div> <div>Probability: Very Likely (95%)</div> <div>Worst Case Impacts: \$150.0K, 0 Days</div>	<div></div> <div></div>	<div></div> <div></div>	<div>Risk Trigger: During day to day operations, PII is discoverable on software or files to those without permission.</div> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)</td><td>Complete</td><td>100</td></tr><tr><td>Finalize DLP alerts and response procedures.</td><td>10/2021</td><td>18</td></tr><tr><td>Provide additional training to employees for proper handling of PII. OOU training development between Cyber Security and Safeguards and Security.</td><td>Ongoing</td><td>NA</td></tr><tr><td>When unintended access to PII is found, evaluate and implement best method of correction.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OOU.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Develop operational controls and alerts for file control access.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Encrypt data at rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.</td><td>TBD</td><td>0</td></tr></table> <div>Mitigation Action Assessment:</div> <div>No major changes in the month of May.</div> <div>Perform mitigation in accordance with DOE Privacy Program – CRD O 206.1.</div> <div>In May, O365 is being implemented site-wide which will allow the DLP rules, tips and/or prompt users for action to be implemented. The O365 implementation is forecasted for completion 07/2021. The finalization of the DLP alerts and response procedures is forecasted for 10/2021.</div>	Mitigation Action(s)	FC Date	%	Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)	Complete	100	Finalize DLP alerts and response procedures.	10/2021	18	Provide additional training to employees for proper handling of PII. OOU training development between Cyber Security and Safeguards and Security.	Ongoing	NA	When unintended access to PII is found, evaluate and implement best method of correction.	Ongoing	NA	Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OOU.	Ongoing	NA	Develop operational controls and alerts for file control access.	Ongoing	NA	Encrypt data at rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.	TBD	0												
Mitigation Action(s)	FC Date	%																																						
Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)	Complete	100																																						
Finalize DLP alerts and response procedures.	10/2021	18																																						
Provide additional training to employees for proper handling of PII. OOU training development between Cyber Security and Safeguards and Security.	Ongoing	NA																																						
When unintended access to PII is found, evaluate and implement best method of correction.	Ongoing	NA																																						
Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OOU.	Ongoing	NA																																						
Develop operational controls and alerts for file control access.	Ongoing	NA																																						
Encrypt data at rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.	TBD	0																																						

SECTION A

<p>ITCS-0007-T: Insufficient Fiber Cable Inventory</p> <p>Legacy Risk #: 1981 & InfoM-0017-T & IMS-0017-T</p>	<p>If on-hand fiber optic cable inventory remains insufficient to maintain, enhance, or expand existing network infrastructure, then MSA could find itself unable to recover from infrastructure damage or provide desired network redundancy resulting in impacts to sitewide operations and future reliability projects.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Very Likely (95%) Worst Case Impacts: \$4.0M, 0 Days</p>			<p>Risk Trigger: Due to additional network demand, and the lack of readily available cable inventory the project experiences a cost impact.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform study to determine feasibility of alternative and/or complimentary risk handling activities. Potential RHPs include, but are not limited to: Wavelength-division multiplexing, Wireless-based support strategy (temp. Wi-flex in areas to supply basic services), Consolidating/reducing legacy systems to reduce strain on current fiber optic capacity, Redistribute/optimize current equipment, Connect fiber from A8 substation to Midway substation (provides redundancy from site to Richland)</td><td>Complete</td><td>100</td></tr><tr><td>Out-year project L-819 (FY23 – estimated \$5M) exists to address additional connectivity from the Central Plateau area to the Federal Building.</td><td>FY2023</td><td>0</td></tr></table> <p>Mitigation Action Assessment: No major changes in the month of May. Out-year project L-819 is currently planned in efforts to address additional connectivity from the Central Plateau area to the Federal Building in Richland. If any of these proposed actions are proven to be feasible, the formal risk handling plan will be updated to align. The study to determine the feasibility of alternative and/or complimentary risk handling actions was completed. The study concluded that a graded approach with three different optimization techniques to increase the availability of fiber at Hanford. The optimizations and approach include implementing bi-directional (Bi-Di) connections; optimizing the current fiber use through Coarse Wavelength Division Multiplexing (CWDM) and Dense Wavelength Division Multiplexing (DWDM); and installing new fiber and re-routing old fiber to free up existing fiber.</p>	Mitigation Action(s)	FC Date	%	Perform study to determine feasibility of alternative and/or complimentary risk handling activities. Potential RHPs include, but are not limited to: Wavelength-division multiplexing, Wireless-based support strategy (temp. Wi-flex in areas to supply basic services), Consolidating/reducing legacy systems to reduce strain on current fiber optic capacity, Redistribute/optimize current equipment, Connect fiber from A8 substation to Midway substation (provides redundancy from site to Richland)	Complete	100	Out-year project L-819 (FY23 – estimated \$5M) exists to address additional connectivity from the Central Plateau area to the Federal Building.	FY2023	0			
Mitigation Action(s)	FC Date	%														
Perform study to determine feasibility of alternative and/or complimentary risk handling activities. Potential RHPs include, but are not limited to: Wavelength-division multiplexing, Wireless-based support strategy (temp. Wi-flex in areas to supply basic services), Consolidating/reducing legacy systems to reduce strain on current fiber optic capacity, Redistribute/optimize current equipment, Connect fiber from A8 substation to Midway substation (provides redundancy from site to Richland)	Complete	100														
Out-year project L-819 (FY23 – estimated \$5M) exists to address additional connectivity from the Central Plateau area to the Federal Building.	FY2023	0														
<p>ITCSS-0003-T: Emergency siren activation failure.</p> <p>Legacy Risk #: 1684 & InfoM-0009-T & IMS-0009-T</p>	<p>If the signal to Emergency Siren(s) were intercepted, due to the signal being unencrypted or if Emergency Siren(s) activation failed, then false alarms could be sounded resulting in miscommunication or a legitimate emergency response could potentially be delayed. Either scenario would reduce Hanford personnel confidence in the emergency notification system and cause a Stop Work.</p> <p>Risk Handling Strategy: Avoid</p> <p>Probability: Unlikely (10%) Worst Case Impacts: \$0.0, 0 Days</p>			<p>Risk Trigger: Emergency Sirens fail during a test or emergency situation.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Procure and deploy new activation software (CentrAlert).</td><td>FY23</td><td>15</td></tr><tr><td>Revise procedures as necessary.</td><td>FY2023</td><td>0</td></tr></table> <p>Mitigation Action Assessment: No major changes in the month of May. Hanford Site Emergency Alerting System (HSEAS) is being implemented in multiple phases. The encryption of the signal is forecasted for implementation in FY23.</p>	Mitigation Action(s)	FC Date	%	Procure and deploy new activation software (CentrAlert).	FY23	15	Revise procedures as necessary.	FY2023	0			
Mitigation Action(s)	FC Date	%														
Procure and deploy new activation software (CentrAlert).	FY23	15														
Revise procedures as necessary.	FY2023	0														
<p>ITCS-0008-T: IM cannot perform Alternative Analysis of Gable Mountain.</p> <p>Legacy Risk #: 2072 & InfoM-0018-T & IMS-0018-T</p>	<p>If Information Management is unable to perform an alternatives analysis for Gable Mountain communications equipment removal because of HMIS's current funding priorities, then HMIS will be unable to holistically scope what would be required to vacate the area resulting in delays or inability to leverage future HMIS projects (reliability or other) in support of the Department of Energy's footprint reduction obligation on Gable Mountain.</p> <p>Risk Handling Strategy: Avoid</p> <p>Probability: Likely (90%) Worst Case Impacts: \$0.0, 0 Days</p>			<p>Risk Trigger: No alternatives to Gable Mountain are acquired or found.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Consolidate equipment and facilities as able, including retiring/moving 623, 630 and 623b HSEAS, WiMax and two-way radio systems. (L-917)</td><td>FY2024</td><td>0</td></tr><tr><td>Relocate commercial radio services and DOE systems to alternate locations as possible. (L-917)</td><td>FY2024</td><td>0</td></tr><tr><td>Perform alternatives analysis & conceptual design for complete, long-term withdrawal from Gable Mountain. (L-917)</td><td>FY2024</td><td>0</td></tr></table> <p>Mitigation Action Assessment: No major changes in the month of May. The completion of Project L-917 would avoid this risk. The project is currently in the planning phase and has not been funded.</p>	Mitigation Action(s)	FC Date	%	Consolidate equipment and facilities as able, including retiring/moving 623, 630 and 623b HSEAS, WiMax and two-way radio systems. (L-917)	FY2024	0	Relocate commercial radio services and DOE systems to alternate locations as possible. (L-917)	FY2024	0	Perform alternatives analysis & conceptual design for complete, long-term withdrawal from Gable Mountain. (L-917)	FY2024	0
Mitigation Action(s)	FC Date	%														
Consolidate equipment and facilities as able, including retiring/moving 623, 630 and 623b HSEAS, WiMax and two-way radio systems. (L-917)	FY2024	0														
Relocate commercial radio services and DOE systems to alternate locations as possible. (L-917)	FY2024	0														
Perform alternatives analysis & conceptual design for complete, long-term withdrawal from Gable Mountain. (L-917)	FY2024	0														

SECTION A

<p>IMS-0022-T: Control of Personally Identifiable Information (PII) is lost.</p> <p>Legacy Risk #: 1443 & InfoM-0022-T</p>	<p>If control of Personally Identifiable Information (PII) is lost, due to intentional exploitation of vulnerabilities in existing software applications or legacy files by Site personnel, then corrections must be implemented and notifications sent, resulting in additional costs and damage to HMIS's relationships with the OHCs and DOE.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Unlikely (20%)</p> <p>Worst Case Impacts: \$27.5M, 0 Days</p>	<div><div></div><div></div></div>	<p>Risk Trigger: Access to PII is discoverable through the exploitation of vulnerabilities in existing software applications or legacy files to those without permission.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)</td><td>Complete</td><td>100</td></tr><tr><td>Provide additional training to employees for proper handling of PII. OUC training is being developed between Cyber Security and Safeguards and Security.</td><td>Ongoing</td><td>NA</td></tr><tr><td>When unintended access to PII is found, evaluate and implement best method of correction.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OUC.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Encrypt data at risk rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.</td><td>TBD</td><td>0</td></tr></table> <p>Mitigation Action Assessment:</p> <p>No major changes in the month of May.</p> <p>Data at rest encryption is a dormant action because there is no requirement at present. Operational controls and alerts for file control access are an ongoing development.</p>	Mitigation Action(s)	FC Date	%	Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)	Complete	100	Provide additional training to employees for proper handling of PII. OUC training is being developed between Cyber Security and Safeguards and Security.	Ongoing	NA	When unintended access to PII is found, evaluate and implement best method of correction.	Ongoing	NA	Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OUC.	Ongoing	NA	Encrypt data at risk rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.	TBD	0
Mitigation Action(s)	FC Date	%																			
Procure tool and perform searches to proactively detect PII in systems and files. [ROM cost/duration - \$50K/3-6 months] and implement corrections as appropriate at an estimated \$25K per instance. (O365 G5 licenses with DLP will scan anything stored with OneDrive or Outlook.)	Complete	100																			
Provide additional training to employees for proper handling of PII. OUC training is being developed between Cyber Security and Safeguards and Security.	Ongoing	NA																			
When unintended access to PII is found, evaluate and implement best method of correction.	Ongoing	NA																			
Compliance office will have two search analysts searching the front end of Integrated Document Management System (IDMS) for unidentified PII. Institute a vault process for controlling PII and other OUC.	Ongoing	NA																			
Encrypt data at risk rest. Would require alternatives/business case analysis to determine license fees, communications, switches for throughput, bandwidth and infrastructure requirements, etc. [Cost/duration - \$TBD/24 months] Not a NIST requirement.	TBD	0																			

3.6 HMIS ET&P Mission Key Risks

- **BCRs:** No BCRs were processed in May that impact the project's MR or SM profile.
- **Risk Analysis:** No risk analysis conducted in May.
- **Current Risk Posture:**

Table A-14. ET&P Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	0	0	0	2	2
May	0	0	0	0	2	2

Table A-15. ET&P Key Risks

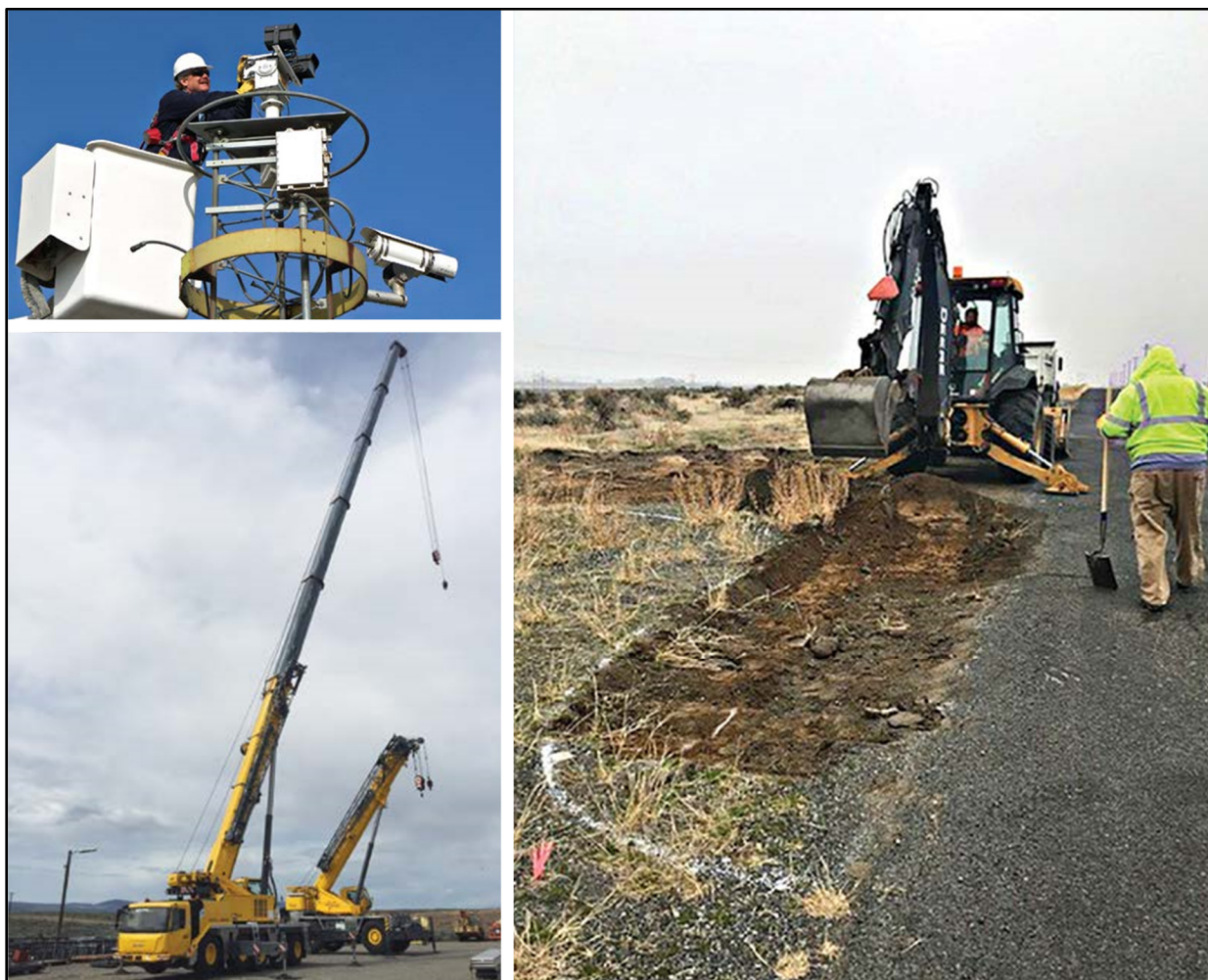
	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
ET&PM- Mission Risks				
Explanation of major changes to the program monthly spotlight chart: No major changes to the Spotlight Charts in May .				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No Realized Risks in May .				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)				
No Critical Risks in May .				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No High Risks in May .				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
ETP-0009-T: NEPA screen determines reliability project must have an EA. Legacy Risk #: 1949 & SSIM-0009-T	If a reliability project or projects require an Environment Assessment (EA) because the National Environmental Policy Act (NEPA) screen determines a Categorical Exclusion (CX) does not apply, then additional labor and financial resources will be required for HMIS and DOE oversight of the project(s) impacting project schedule and cost.			
ETP-0010-T: NEPA screen determines a reliability project requires an EIS. Legacy Risk #: 1950 & SSIM-0010-T	If a reliability project or projects require an Environmental Impact Statement (EIS) because the National Environmental Policy Act (NEPA) screen determines a Categorical Exclusion (CX) does not apply, then additional labor and financial resources will be required for HMIS and DOE oversight of the project(s) impacting project schedule and cost.			

4.0 DOE ACTIONS/DECISIONS

Table A-16. DOE Actions/Decisions

Description	HMIS Delivery Date	Expected DOE-RL Due Date
N/A		

Section B



**Monthly Project Performance Report
(CD0162)**

1.0 RELIABILITY PROJECTS EXECUTIVE SUMMARY

Covered above in 1.0 EXECUTIVE SUMMARY.

2.0 SAFETY PERFORMANCE

Nothing to report in the month of May.

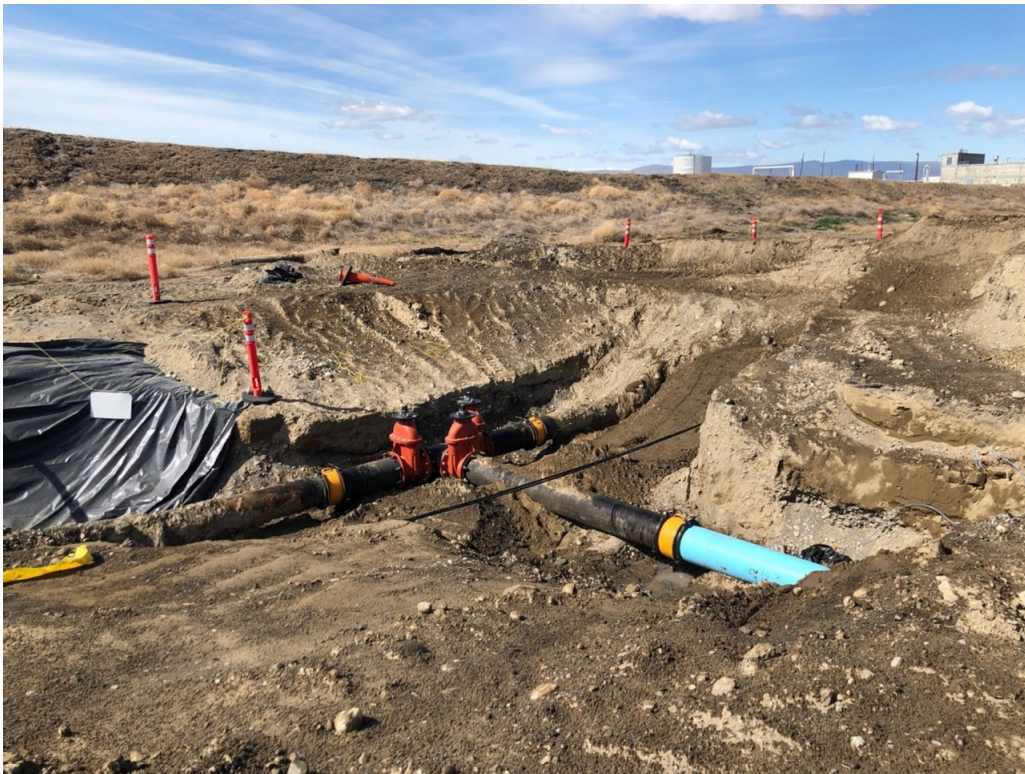
3.0 KEY ACCOMPLISHMENTS

Significant accomplishments and progress towards completion of goals and objectives, for the month of May, included:

- L-612, 230kV Transmission System Reconditioning and Sustainability Upgrades: Issued Request for Proposal for Performing the Condition Assessment of the Existing 230kV Transmission System
- L-720, Outdoor Lighting Reconfiguration and Replacement: Conducted Construction Kickoff meeting and mobilized to the field.
- L-796, Key Facilities Roof Replacement: Mobilized construction contractor to field and began first of 12 planned roof replacements.
- L-801, SCADA Upgrades: Completed installation and testing of Remote Terminal Unit #3.
- L-819, High Capacity Fiber Optic Cable: Completed Conceptual Design
- L-826, 181 B Vertical Turbine Pumps: Completed 30% design review.
- L-839, 12-inch Potable Water Loop-Line to WTP: Completed clearing and grubbing of site and commenced installation of piping.
- L-849, Replace 200E Potable Water Tank: Completed 60% design review meeting.
- L-861, Single-Circuit Distribution Pole Replacement: Conducted 60% Design Review
- L-895, Fire Protection Infrastructure for Plateau Raw Water: Completed installation of instrumentation in 282W pump house and restored gravel around 282WF building, exterior pads and installed bollards.
- L-888, 400 Area Fire Station: Submitted draft Health Impacts Assessment to DOE for an initial review
- L-897, Central Plateau Water Treatment Facility: Conducted construction kick off meeting.
- L-933, Installation of Mobile Office Trailers – 200E: Closed Project.
- L-934, Office Space Gap Reduction – 200E: Completed installation of sewer and water lines. Set Electrical Vaults and Trailers.



L-796 Roof work MO-285 (5/20/21)



L-934 Waterline Tie-In East (5/18/21)

SECTION B



L-934 Electrical Rack and Panel Installation (5/5/21)

4.0 EARNED VALUE MANAGEMENT

Table B-1. Reliability Project Performance

WBS for May	CURRENT PERIOD (CP)					FISCAL YEAR TO DATE (FYTD)					CUMULATIVE TO DATE (CTD)					AT COMPLETION		
	BUDGETED COST		ACTUAL COST		VARIANCE	BUDGETED COST		ACTUAL COST		VARIANCE	BUDGETED COST		ACTUAL COST		VARIANCE	BAC	EAC	VARIANCE
	BCWS	BCWP	ACWP	SCHEDULE COST		BCWS	BCWP	ACWP	SCHEDULE COST		BCWS	BCWP	ACWP	SCHEDULE COST				
4001.07.01.01.01 - L-839, 12in Potable Water Loop-line	\$97	\$442	\$444	\$345	(\$2)	\$132	\$511	\$553	\$379	(\$42)	\$132	\$511	\$553	\$379	(\$42)	\$1,791	\$1,786	\$4
4001.07.01.01.02 - L-850, Replace 200W 1.1M-gal PW Tank	\$126	\$125	\$159	(\$1)	(\$34)	\$704	\$724	\$844	\$20	(\$120)	\$704	\$724	\$844	\$20	(\$120)	\$5,147	\$5,416	(\$269)
4001.07.01.01.03 - L-897, Central Plateau Water Treatment Facility	\$181	\$134	\$106	(\$47)	\$28	\$1,934	\$1,282	\$1,250	(\$652)	\$33	\$1,934	\$1,282	\$1,250	(\$652)	\$33	\$9,453	\$9,996	(\$543)
4001.07.01.01.04 - L-781, 181D Vertical Turbine Pumps	\$14	\$43	\$17	\$29	\$26	\$643	\$641	\$577	(\$2)	\$64	\$643	\$641	\$577	(\$2)	\$64	\$754	\$704	\$51
4001.07.01.01.05 - L-826, 181B Vertical Turbine Pumps	\$240	\$205	\$210	(\$35)	(\$5)	\$348	\$297	\$238	(\$51)	\$59	\$348	\$297	\$238	(\$51)	\$59	\$417	\$335	\$82
4001.07.01.01.06 - L-849, Replace 200E 1.1M-gal PW Tank	\$43	\$70	\$52	\$27	\$18	\$297	\$244	\$195	(\$53)	\$49	\$297	\$244	\$195	(\$53)	\$49	\$545	\$495	\$50
4001.07.01.01.07 - L-894, Raw Water Cross Connect Isolation 200E/W	\$10	\$6	\$12	(\$4)	(\$7)	\$45	\$27	\$43	(\$18)	(\$16)	\$45	\$27	\$43	(\$18)	(\$16)	\$178	\$226	(\$48)
4001.07.01.01.08 - L-895, Fire Protection Infrastructure for PRW	\$239	\$110	\$143	(\$129)	(\$33)	\$1,089	\$628	\$833	(\$461)	(\$205)	\$1,089	\$628	\$833	(\$461)	(\$205)	\$2,702	\$2,578	\$124
4001.07.01.01.09 - L-838, Water Feeds to 622R, 6608 & 200W Lagoons	\$2	\$2	\$1	(\$1)	\$1	\$2	\$2	\$1	(\$1)	\$1	\$2	\$2	\$1	(\$1)	\$1	\$32	\$37	(\$5)
4001.07.02.01.01 - L-853, 200E Sewer Flow Equalization Facility	\$15	\$13	\$16	(\$2)	(\$3)	\$65	\$42	\$42	(\$23)	\$0	\$65	\$42	\$42	(\$23)	\$0	\$70	\$67	\$3
4001.07.02.01.02 - L-854, 200E Sewer Consolidations	\$29	\$4	\$3	(\$25)	\$0	\$63	\$22	\$12	(\$41)	\$10	\$63	\$22	\$12	(\$41)	\$10	\$63	\$31	\$32
4001.07.03.01.01 - L-801 Upgrade SCADA	\$91	(\$384)	(\$213)	(\$476)	(\$172)	\$547	\$0	\$136	(\$547)	(\$136)	\$547	\$0	\$136	(\$547)	(\$136)	\$2,187	\$2,322	(\$136)
4001.07.03.01.02 - L-791, RFL Transfer Trip Upgrades	\$0	\$0	(\$2)	\$0	\$2	\$0	\$0	\$8	\$0	(\$8)	\$0	\$0	\$8	\$0	(\$8)	\$0	\$8	(\$8)
4001.07.03.01.03 - L-707, Advanced Electrical Metering	\$11	\$10	\$11	(\$1)	(\$0)	\$53	\$40	\$30	(\$13)	\$10	\$53	\$40	\$30	(\$13)	\$10	\$94	\$94	(\$0)
4001.07.03.01.04 - L-905, FARS & RFARS Replacement & Upgrade	\$2	\$8	\$39	\$6	(\$31)	\$183	\$168	\$196	(\$14)	(\$27)	\$183	\$168	\$196	(\$14)	(\$27)	\$286	\$310	(\$24)
4001.07.03.01.05 - L-911, Route 4S Lighting in 300 Area	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$0	\$0	\$0	\$0	(\$0)	\$50	\$50	(\$0)
4001.07.03.01.06 - L-898, 100 Area Mission Crit Dist Feeders Repl	\$81	\$84	\$96	\$3	(\$12)	\$250	\$232	\$239	(\$18)	(\$6)	\$250	\$232	\$239	(\$18)	(\$6)	\$546	\$546	\$0
4001.07.03.02.01 - L-612, 230kV Trans Sys Recon & Sustainability	\$50	\$34	\$23	(\$16)	\$11	\$112	\$92	\$65	(\$20)	\$27	\$112	\$92	\$65	(\$20)	\$27	\$224	\$199	\$26
4001.07.03.02.02 - L-861, Single-Circuit Distribution Pole Replace	\$86	\$49	\$92	(\$37)	(\$43)	\$281	\$233	\$266	(\$47)	(\$33)	\$281	\$233	\$266	(\$47)	(\$33)	\$486	\$530	(\$44)
4001.07.03.02.03 - L-789, Priorit T&D Sys Wood PP Test & Replace	\$975	\$963	\$856	(\$13)	\$107	\$3,351	\$1,874	\$2,118	(\$1,477)	(\$244)	\$3,351	\$1,874	\$2,118	(\$1,477)	(\$244)	\$4,458	\$4,390	\$69
4001.07.03.02.04 - L-720, Outdoor Lighting Reconfiguration & Repl	\$270	\$224	\$195	(\$46)	\$29	\$747	\$559	\$490	(\$188)	\$70	\$747	\$559	\$490	(\$188)	\$70	\$2,255	\$2,156	\$99
4001.07.04.02.01 - L-534, Overlay Interior 200 East Roads	(\$3)	\$1	\$2	\$4	(\$1)	\$23	\$23	\$47	(\$0)	(\$25)	\$23	\$23	\$47	(\$0)	(\$25)	\$23	\$2,109	(\$2,086)
4001.07.04.02.02 - L-603, Chip Seal Route 3N (Route 11A to Route 3)	(\$6)	\$0	(\$1)	\$6	\$1	\$22	\$22	\$40	\$0	(\$18)	\$22	\$22	\$40	\$0	(\$18)	\$22	\$1,380	(\$1,359)
4001.07.04.02.03 - L-883, Chip Seal Rt 10, SR-240 to WYE Barricade	(\$3)	\$1	\$1	\$4	(\$0)	\$24	\$24	\$42	(\$0)	(\$18)	\$24	\$24	\$42	(\$0)	(\$18)	\$24	\$1,810	(\$1,787)
4001.07.05.01.01 - L-888, 400 Area Fire Station	\$4	\$4	\$11	(\$1)	(\$7)	\$20	\$17	\$64	(\$2)	(\$46)	\$20	\$17	\$64	(\$2)	(\$46)	\$39	\$86	(\$47)
4001.07.05.01.02 - L-907, Fleet Complex Site Development	\$13	\$14	\$24	\$1	(\$11)	\$443	\$433	\$296	(\$10)	\$136	\$443	\$433	\$296	(\$10)	\$136	\$1,835	\$2,119	(\$284)
4001.07.05.01.03 - L-934, MSC Office Space Gap Reduction - 200E	\$408	\$217	\$248	(\$191)	(\$31)	\$1,390	\$1,390	\$1,414	\$0	(\$24)	\$1,390	\$1,390	\$1,414	\$0	(\$24)	\$2,409	\$2,433	(\$24)
4001.07.05.01.04 - L-933, Install Mobile Office Trailers - 200E	\$0	\$4	\$5	\$4	(\$1)	\$17	\$17	\$43	\$0	(\$26)	\$17	\$17	\$43	\$0	(\$26)	\$17	\$43	(\$26)
4001.07.05.02.01 - L-796, Key Facilities Roof Replacements	\$323	\$166	\$174	(\$158)	(\$8)	\$429	\$258	\$303	(\$171)	(\$44)	\$429	\$258	\$303	(\$171)	(\$44)	\$1,578	\$1,607	(\$29)
4001.07.06.01.01 - L-921, Telecom Hut at Met Tower	\$15	\$4	\$47	(\$12)	(\$44)	\$713	\$593	\$606	(\$120)	(\$13)	\$713	\$593	\$606	(\$120)	(\$13)	\$722	\$819	(\$97)
4001.07.06.01.02 - L-919, Emergency Radio Upgrade	\$117	\$59	\$52	(\$58)	\$7	\$245	\$94	\$213	(\$151)	(\$119)	\$245	\$94	\$213	(\$151)	(\$119)	\$3,510	\$3,512	(\$2)
4001.07.06.01.05 - L-819, High Capacity Fiber Optic (300 Area)	\$30	\$8	\$3	(\$21)	\$5	\$127	\$47	\$8	(\$80)	\$39	\$127	\$47	\$8	(\$80)	\$39	\$1,283	\$1,150	\$133
4001.07.06.02.04 - L-937, Gable East Footprint Reduction (Phase 1)	\$562	\$126	\$48	(\$436)	\$77	\$1,914	\$432	\$263	(\$1,482)	\$169	\$1,914	\$432	\$263	(\$1,482)	\$169	\$2,076	\$1,651	\$425
4001.07.97.01.01.01 - IRP - Out-Year Summary Level Planning Package	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$339,402	\$338,574	\$828
Grand Total	\$4,024	\$2,745	\$2,876	(\$1,279)	(131)	\$16,209	\$10,968	\$11,472	(\$5,242)	(504)	\$16,209	\$10,968	\$11,472	(\$5,242)	(504)	\$384,678	\$389,568	(4,890)

Cost Variance Analysis: The CM unfavorable CV of (-\$131K) is primarily due to:

- L-801, Upgrade SCADA CM unfavorable cost variance is due to further pending cost transfers that are a continuation of those completed during the current period. Several

resources such as training costs are still pending cost transfer and will be completed in the next fiscal month. In parallel with the BCR being completed to remove previous activities and replan L-801 using milestone payment schedule of values under RPTO-007, cost transfers were executed to align PMB ACWP with proposed milestone payment values. Upon completion of milestones, payment values will be accrued for firm-fixed price invoicing to DOE. (-\$172.0K)

Schedule Variance Analysis: The CM unfavorable SV of (\$1,279K) is primarily due to:

- Schedule impacts to IRP – Water System projects (4001.07.01)
 - o L-801, Upgrade SCADA performance measurement baseline (PMB) was changed via a Baseline Change Request (BCR) to reflect the proposed Firm-fixed Price milestone payment schedule of values as submitted in RPTO-007. The BCR required a point adjustment during the current period. (-\$476K)
 - o Schedule Impacts to IRP – Network & Telecom System (4001.07.06)
 - o L-937, Gabe East Footprint Reduction (Phase 1) Engineering Change Request driving schedule impacts to RSC and Solar Array procurement and construction activities. ECR forecasted to complete in June. (-\$436K)
- Schedule Impacts to IRP – Facility System (4001.07.05)
 - o L-934, Office Space Gap Reduction – CM unfavorable SV is due to the realization of BCWS in the current period for construction scope that was completed in a prior period ahead of schedule. (-\$191K)

Variance at Completion: The unfavorable VAC of (\$4,890K) is primarily due to the following project drivers:

- L-534, Overlay Interior 200 East Roads construction scope was removed from Performance Measurement Baseline via BCR, however spend forecast was still maintained in cost system. VAC will be corrected next fiscal month. (-\$2,086K)
- L-883, Chip Seal Rt 10, SR-240 to WYE Barricade construction scope was removed from Performance Measurement Baseline via BCR, however spend forecast was still maintained in cost system. VAC will be corrected next fiscal month. (-\$1,787K)
- L-603, Chip Seal Route 3N (Route 11A to Route 3) construction scope was removed from Performance Measurement Baseline via BCR, however spend forecast was still maintained in cost system. VAC will be corrected next fiscal month. (-\$1,359K)

5.0 PROJECT RISK ASSESSMENT

5.1 HMIS L-612 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **May**.
- **Current Risk Posture:**

Table B-2. L-612 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	0	0	0	0	15
May	0	0	0	0	0	15

Table B-3. L-612 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
L612 –230Kv Transmission System Reconditioning and Sustainability Repairs - Project Risks				
Explanation of major changes to the program monthly spotlight chart: L-612 is moving forward with the North Loop Section Condition Assessment. RFP return date extended into mid-June. Condition of the North Loop will need to be determined and costed out. This does not directly affect the BPA Schedule and is considered an Operations activity.				





5.2 HMIS L-789 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **May**.
- **Current Risk Posture:**

Table B-4. L-789 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	-	-	-	-	-	-
May	0	2	0	0	0	12

Table B-5. L-789 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
L789 - Priority T&D Sys Wood PP Test & Replace - Project Risks																			
Explanation of major changes to the program monthly spotlight chart: No major changes to the Stoplight Chart in May. Realized risk L-789-0014-T: Linemen Mutual Aid was an artifact of poor weather and is no longer being realized. Risk will continue to be monitored.																			
Realized Risks (Risks that are currently impacting project cost/schedule)																			
No Realized Risks in May.																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																			
L789-0014-T: Linemen Mutual Aid. Legacy Risk #: NA	If sub-contractor linemen are called to support mutual aid agreements by utilities in the in the event of power outages due to severe weather, including wildfires, then project schedule and cost will be impacted. Risk Handling Strategy: Mitigate Probability: Somewhat Likely (50%) Worst Case Impacts: \$0, 96 days			Risk Trigger: An incident requiring support of linemen through the mutual aid agreement. <table border="1"><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Construction contract to remain open until all transmission/distribution projects complete</td><td>Ongoing</td><td>NA</td></tr></tbody></table> Mitigation Action Assessment: No major changes in the month of May.	Mitigation Action(s)	FC Date	%	Construction contract to remain open until all transmission/distribution projects complete	Ongoing	NA									
Mitigation Action(s)	FC Date	%																	
Construction contract to remain open until all transmission/distribution projects complete	Ongoing	NA																	
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
L789-0006-T: EU resource constraints prevent new equipment electrical tie-ins. Legacy Risk #: 1962	If an EU outage is delayed because of operational constraints, then some scheduled work may need to be reprioritized impacting project schedule. Risk Handling Strategy: Accept Probability: Likely (75%) Worst Case Impacts: \$0, 32 days			Risk Trigger: Operational delays resulting in delays. <table border="1"><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Identify engineering needs to lead engineer during at the IPT meeting.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Establish engineering review needs during conceptual design phase.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Coordinate engineering support availability into project schedule.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Communicate scheduling changes impacting engineering review to lead engineer.</td><td>Ongoing</td><td>NA</td></tr></tbody></table> Mitigation Action Assessment: No major changes in the month of May.	Mitigation Action(s)	FC Date	%	Identify engineering needs to lead engineer during at the IPT meeting.	Ongoing	NA	Establish engineering review needs during conceptual design phase.	Ongoing	NA	Coordinate engineering support availability into project schedule.	Ongoing	NA	Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing	NA
Mitigation Action(s)	FC Date	%																	
Identify engineering needs to lead engineer during at the IPT meeting.	Ongoing	NA																	
Establish engineering review needs during conceptual design phase.	Ongoing	NA																	
Coordinate engineering support availability into project schedule.	Ongoing	NA																	
Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing	NA																	
Unassigned Risks (Pending ownership of identified risks/opportunities)																			
No unassigned risks identified in May.																			

5.3 HMIS L-839 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **May**.
- **Current Risk Posture:**



Table B-6. L-839 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	-	-	-	-	-	-
May	0	2	0	0	0	6

Table B-7. L-839 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
L-839, 12in Potable Water Loop-line																
Explanation of major changes to the program monthly spotlight chart: No major changes to the Stoplight Chart in May.																
Realized Risks (Risks that are currently impacting project cost/schedule)																
No realized risks in May.																
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																
No critical risks identified in May.																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
L839-0018-T: Construction material/equipment received late. Legacy Risk #: N/A	If building materials (steel, ductile iron, PVC, etc.) are received late because of errors, delivered behind schedule or damaged in transit then schedule will be impacted. Risk Handling Strategy: Accept Probability: Likely (80%) Worst Case Impacts: \$0, 64 days	<div><div></div></div>	<div><div></div></div>	<div>Risk Trigger: Project procurement.</div> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Identify items requiring extended procurement times during design phase.</td><td>Complete</td><td>100</td></tr><tr><td>Order construction materials as soon as quantities needed are verified.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Coordinate storage of construction materials HMIS laydown yard or alternate location.</td><td>Ongoing</td><td>NA</td></tr></table> <div>Mitigation Action Assessment: No major changes in the month of May. Received the bulk of the 12" pipe to be installed on the project and began stringing it out along the pipe route.</div>	Mitigation Action(s)	FC Date	%	Identify items requiring extended procurement times during design phase.	Complete	100	Order construction materials as soon as quantities needed are verified.	Ongoing	NA	Coordinate storage of construction materials HMIS laydown yard or alternate location.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Identify items requiring extended procurement times during design phase.	Complete	100														
Order construction materials as soon as quantities needed are verified.	Ongoing	NA														
Coordinate storage of construction materials HMIS laydown yard or alternate location.	Ongoing	NA														

SECTION B

	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
L-839, 12in Potable Water Loop-line																			
L839-0019-T: Construction material price increase. Legacy Risk #: N/A	If the price of construction materials (e.g. steel, ductile iron, PVC) increase significantly (e.g. +25%) then project cost will be impacted. Risk Handling Strategy: Accept Probability: Likely (75%) Worst Case Impacts: \$0, 32 days			Risk Trigger: Project procurement. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Identify building materials at risk for price fluctuations during design.</td><td>Complete</td><td>100</td></tr><tr><td>Contact procurements regarding at risk building materials.</td><td>Complete</td><td>100</td></tr><tr><td>Monitor price fluctuations as price spikes will impact project costs.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Emphasize price spikes to construction sub-contractor.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . Received the bulk of the 12" pipe to be installed on the project and began stringing it out along the pipe route.	Mitigation Action(s)	FC Date	%	Identify building materials at risk for price fluctuations during design.	Complete	100	Contact procurements regarding at risk building materials.	Complete	100	Monitor price fluctuations as price spikes will impact project costs.	Ongoing	NA	Emphasize price spikes to construction sub-contractor.	Ongoing	NA
Mitigation Action(s)	FC Date	%																	
Identify building materials at risk for price fluctuations during design.	Complete	100																	
Contact procurements regarding at risk building materials.	Complete	100																	
Monitor price fluctuations as price spikes will impact project costs.	Ongoing	NA																	
Emphasize price spikes to construction sub-contractor.	Ongoing	NA																	
Unassigned Risks (Pending ownership of identified risks/opportunities)																			
No unassigned risks identified in May .																			

5.4 HMIS L-850 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **May**.
- **Current Risk Posture:**









Table B-8. L-850 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	0	2	0	0	1	24
May	0	6	0	1	3	23

Table B-9. L-850 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
L850 - Replace 200W 1.1M-gal PW Tank - Project Risks																
Explanation of major changes to the program monthly stoplight chart: No major changes to the Stoplight Chart in May .																
Realized Risks (Risks that are currently impacting project cost/schedule)																
No realized risks in May .																
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																
L850-0019-T: SWOC and MDSAS DOE Approval Legacy Risk #: 3208 & L850-0019-T	If a revision to the Solid Waste Operations Complex (SWOC) Master Documented Safety Analysis (MDSA) or approval of a new safety basis document is not approved by DOE by the end of the project then a project delay will occur impacting schedule. Risk Handling Strategy: Accept Probability: Somewhat Likely (50%) Worst Case Impacts: \$0, 192 days	<div></div>	<div></div>	Risk Trigger: MDSA or approval of a new safety basis document is not approved by DOE. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Risk is accepted with no mitigation actions planned at this time.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May .	Mitigation Action(s)	FC Date	%	Risk is accepted with no mitigation actions planned at this time.	Ongoing	NA						
Mitigation Action(s)	FC Date	%														
Risk is accepted with no mitigation actions planned at this time.	Ongoing	NA														
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
L850-0001-T: Design Errors or Omissions Resulting in Redesign and Rework Legacy Risk #: 3087 & L850-0001-T	If Design errors or omissions result in redesign and rework, then project cost and schedule will be impacted. Risk Handling Strategy: Accept Probability: Unlikely (18%) Worst Case Impacts: \$50.0K, 96 days	<div></div>	<div></div>	Risk Trigger: Design reviews reveal comments/issues were not incorporated into them causing rework and potential delays. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Coordinate engineering support availability into project schedule.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Communicate scheduling changes impacting engineering review to lead engineer.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Create adequate review and comment periods in the schedule for reviewing the A/E's 30%, 60%, 90% & 100% products.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . In May , HMIS continued release of revised DCN-002 documents.	Mitigation Action(s)	FC Date	%	Coordinate engineering support availability into project schedule.	Ongoing	NA	Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing	NA	Create adequate review and comment periods in the schedule for reviewing the A/E's 30%, 60%, 90% & 100% products.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Coordinate engineering support availability into project schedule.	Ongoing	NA														
Communicate scheduling changes impacting engineering review to lead engineer.	Ongoing	NA														
Create adequate review and comment periods in the schedule for reviewing the A/E's 30%, 60%, 90% & 100% products.	Ongoing	NA														

SECTION B

<p>L850-0004-T: Discovery of Unidentified, Underground Interference</p> <p>Legacy Risk #: 3090 & L850-0004-T</p>	<p>If underground interferences are discovered during construction or are missed during ground-scans, then project schedule and cost will be impacted.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Somewhat Likely (50%) Worst Case Impacts: \$90.0K, 48 days</p>			<p>Risk Trigger: During potholing, trenching, or tie-in work underground interferences are discovered.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Utilize historical documents if available.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Perform scan of the route/footprint utilizing ground penetrating radar (GPR) to aid planning and estimates.</td><td>08/2021</td><td>NA</td></tr><tr><td>Utilize hand tools to trench/excavate/pothole in highly congested areas/corridors.</td><td>Ongoing</td><td>NA</td></tr></table> <p>Mitigation Action Assessment: No major changes in the month of May.</p>	Mitigation Action(s)	FC Date	%	Utilize historical documents if available.	Ongoing	NA	Perform scan of the route/footprint utilizing ground penetrating radar (GPR) to aid planning and estimates.	08/2021	NA	Utilize hand tools to trench/excavate/pothole in highly congested areas/corridors.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Utilize historical documents if available.	Ongoing	NA														
Perform scan of the route/footprint utilizing ground penetrating radar (GPR) to aid planning and estimates.	08/2021	NA														
Utilize hand tools to trench/excavate/pothole in highly congested areas/corridors.	Ongoing	NA														
<p>L850-0005-T: Discovery of Hazardous Waste or Unknown Container</p> <p>Legacy Risk #: 3091 & L850-0005-T</p>	<p>If hazardous waste or an unknown container is discovered then project schedule and cost will be impacted.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Unlikely (10%) Worst Case Impacts: \$250.0K, 32 days</p>			<p>Risk Trigger: During construction, trenching, or tie-in work hazardous waste or unknown containers are discovered.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Check design route for known waste information data system (WIDS) sites on the Hanford MAPS Stewardship Information Portal (SIP)</td><td>Complete</td><td>100</td></tr><tr><td>Complete site evaluation & excavation permit as well as WIDS crossing checklist during design phase.</td><td>Complete</td><td>100</td></tr><tr><td>Have Radiological staff on hand to survey spill piles as construction occurs.</td><td>Ongoing</td><td>NA</td></tr></table> <p>Mitigation Action Assessment: No major changes in the month of May.</p>	Mitigation Action(s)	FC Date	%	Check design route for known waste information data system (WIDS) sites on the Hanford MAPS Stewardship Information Portal (SIP)	Complete	100	Complete site evaluation & excavation permit as well as WIDS crossing checklist during design phase.	Complete	100	Have Radiological staff on hand to survey spill piles as construction occurs.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Check design route for known waste information data system (WIDS) sites on the Hanford MAPS Stewardship Information Portal (SIP)	Complete	100														
Complete site evaluation & excavation permit as well as WIDS crossing checklist during design phase.	Complete	100														
Have Radiological staff on hand to survey spill piles as construction occurs.	Ongoing	NA														
<p>L850-0018-T: Bid Comes in High</p> <p>Legacy Risk #: 3104 & L850-0018-T</p>	<p>If the bid comes in higher than expected, there are no bidders or there is only a single bidder because the industry market is not well understood, then a rebid or a sole-source justification will be necessary impacting project schedule.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Unlikely (25%) Worst Case Impacts: \$500.0K, 32 days</p>			<p>Risk Trigger: Bids are received higher than expected.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Contact procurement during planning to determine the bidding climate.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Perform cost-price reviews.</td><td>Ongoing</td><td>NA</td></tr></table> <p>Mitigation Action Assessment: No major changes in the month of May.</p>	Mitigation Action(s)	FC Date	%	Contact procurement during planning to determine the bidding climate.	Ongoing	NA	Perform cost-price reviews.	Ongoing	NA			
Mitigation Action(s)	FC Date	%														
Contact procurement during planning to determine the bidding climate.	Ongoing	NA														
Perform cost-price reviews.	Ongoing	NA														
<p>L850-0020-T: Attrition or Staffing Turnover</p> <p>Legacy Risk #: 3212 & L850-0020-T</p>	<p>If attrition or staffing reductions result in staffing turnover during the project, then efficiency will be impacted, resulting in schedule delays.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Somewhat Likely (50%) Worst Case Impacts: \$0.0K, 48 days</p>			<p>Risk Trigger: Staff or key personnel quits or retires.</p> <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Identify key personnel during planning.</td><td>Complete</td><td>100</td></tr><tr><td>Establish back up and alternates for key project positions to reduce impacts.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Maintain good documentation in the event a non-coordinated work turnover occurs.</td><td>Ongoing</td><td>NA</td></tr></table> <p>Mitigation Action Assessment: No major changes in the month of May. With little exception, key personnel positions have alternates and project documentation has reduced the impact of staff attrition.</p>	Mitigation Action(s)	FC Date	%	Identify key personnel during planning.	Complete	100	Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA	Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Identify key personnel during planning.	Complete	100														
Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA														
Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA														

Unassigned Risks (Pending ownership of identified risks/opportunities)	
<p>L850-0013-T: PFP Contamination</p> <p>Legacy Risk #: 3099</p>	<p>If Plutonium Finishing Plant (PFP) contamination spreads to the Project Site, then construction activities could be delayed, impacting project cost and schedule.</p> <p>HMIS Comment: No major changes in the month of May.</p>
<p>L850-0023-T: Department of Ecology disagrees with HMIS submitting two separate NOC applications for separate and non-overlapping air pollutants.</p> <p>Legacy Risk #: L850-0023-T</p>	<p>If the Department of Ecology does not agree with the project's strategy to submit separate NOC applications for separate and non-overlapping air pollutants, and if Ecology's interpretation of the WAC and "start of construction" differs from the project's interpretations and assumptions, then construction activities will be delayed impacting project schedule and cost.</p> <p>HMIS Comment: Department of Ecology has requested a single combined NOC application be submitted for project L-897 as opposed to two single NOC applications as planned. The separate NOC applications were to account for two separate and non-overlapping air pollutants. The NOC applications were to be submitted when the air pollutants would occur within the project schedule. The air pollutant data for the generator won't be known until the generator is shipped and arrives on site. Conservative generator values will need to be used lacking finite details. Per communication from DOE and Ecology, six projects (L-897, L-895, L-850, L-849, L-826 & L-781) will submit a combined NOC application. All projects will also need to follow the new Hanford site modeling protocol. Total impacts still being assessed. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting Construction Mobilization, Water to Grid, and Project Complete.</p>
<p>L850-0024-T: Ambient Air Boundary on Hanford</p> <p>Legacy Risk #: L850-0024-T</p>	<p>If the Notice of Construction (NOC) application is not approved by the Department of Ecology due to disagreement on the ambient air boundary and ambient air modeling, then installation and testing of backup generator, and subsequent project activities are delayed impacting project schedule and cost.</p> <p>HMIS Comment: No major changes in the month of May. This combined NOC approach has delayed installation of the emergency diesel generator at the 200W Pump House resulting in a delay to the 200E outage and related demolition and construction activities to install new pumps and piping within the 200E Pump House. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting 200E RW Pumps Installed and Operational and Project Complete. Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers is currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities. The public notice of public comment period is scheduled for 6/10/2021.</p>



5.5 HMIS L-888 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** A risk analysis was performed on L-888 in January 2021 in support of the development of a Critical Decision (CD) Implementation Approach document and Project Data Sheet (PDS).
- **Current Risk Posture:**

Table B-10. L-888 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	-	-	-	-	-	-
May	0	2	0	0	5	10

Table B-11. L-888 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
L-888, 400 Area Fire Station																
Explanation of major changes to the program monthly spotlight chart: L-888 Construction RFP was put on hold; cannot obtain pricing until DOE-RL issues the L-888 Task Order to HMIS. The construction services requisition is placed back to pending.																
Realized Risks (Risks that are currently impacting project cost/schedule)																
No realized risks in May.																
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																
No critical risks in May.																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
L888-0005-T: Attrition or Staffing Turnover Legacy Risk #: 1986	If attrition or staffing reductions result in staffing turnover during the project, then efficiency will be impacted, resulting in schedule delays. Risk Handling Strategy: Accept Probability: Somewhat Likely (74%) Worst Case Impacts: \$0, 48 days			Risk Trigger: Key project position staff turnover may impact project schedule. <table border="1"><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Identify key personnel during planning.</td><td>Complete</td><td>100</td></tr><tr><td>Establish back up and alternates for key project positions to reduce impacts.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Maintain good documentation in the event a non-coordinated work turnover occurs.</td><td>Ongoing</td><td>NA</td></tr></tbody></table> Mitigation Action Assessment: No major changes in the month of May. With little exception, key personnel positions have alternates and project documentation has reduced the impact of staff attrition.	Mitigation Action(s)	FC Date	%	Identify key personnel during planning.	Complete	100	Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA	Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA
Mitigation Action(s)	FC Date	%														
Identify key personnel during planning.	Complete	100														
Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA														
Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA														

SECTION B

	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
L-888, 400 Area Fire Station													
L888-0009-T: Bid Comes in High Legacy Risk #: 1991	If contractor bid values come in higher than originally anticipated then project schedule and budget may be impacted. Risk Handling Strategy: Accept Probability: Somewhat Likely (26%) Worst Case Impacts: \$1,300.0K, 32 days	<div><div></div></div>	<div><div></div></div>	<div>Risk Trigger: Bids are received higher than expected.<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Contact procurement during planning to determine the bidding climate.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Perform cost-price reviews.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May. This risk was identified as a key risk during the Quantitative Risk Analysis in January 2021.</div>	Mitigation Action(s)	FC Date	%	Contact procurement during planning to determine the bidding climate.	Ongoing	NA	Perform cost-price reviews.	Ongoing	NA
Mitigation Action(s)	FC Date	%											
Contact procurement during planning to determine the bidding climate.	Ongoing	NA											
Perform cost-price reviews.	Ongoing	NA											
Unassigned Risks (Pending ownership of identified risks/opportunities)													
No unassigned risks identified in May.													

5.6 HMIS L-895 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** A risk analysis was performed on L-895 in April 2021 in support of the development of a Critical Decision (CD) Implementation Approach document and Project Data Sheet (PDS).
- **Current Risk Posture:**



Table B-12. L-895 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	1	3	0	0	1	12
May	2	3	0	0	1	12

Table B-13. L-895 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
L-895, Fire Protection Infrastructure for Plateau Raw Water													
Explanation of major changes to the program monthly spotlight chart: No major changes to the Stoplight Chart in May .													
Realized Risks (Risks that are currently impacting project cost/schedule)													
L895-0016-T: Sub-contract novation Legacy Risk #: NA	If existing (sub) contracts are not novated because of subcontracting expectations, then procurements will have to be re-accomplished impacting project schedule and cost. Risk Handling Strategy: Accept Probability: Likely (75%) Worst Case Impacts: \$200.0K, 32 days	<div><div></div></div>	<div><div></div></div>	Risk Event: The A/E contract was not novated during the HMIS contract transition. <table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Re-accomplish Procurement process.</td><td>Complete</td><td>100</td></tr><tr><td>Award A/E contract.</td><td>May 2021</td><td>0</td></tr></table> Recovery Action Assessment: The A/E subcontractor was developing DCNs to support remaining construction, as well as CAT/OAT procedures and Ops/Maintenance procedures. These elements have been delayed and become driving path to 200W OAT. A/E support during construction, and other scope to be performed by the A/E (Operational Acceptance Test procedure development, new operation and maintenance procedure development) was planned to take place in the current period, but is now forecast to start in Fiscal Month June due to delays in awarding the A/E subcontract related to having to go through the full procurement process as this subcontract was not novated to HMIS. BCR being evaluated for schedule and cost impacts. Anticipate processing BCR July/August timeframe.	Recovery Action(s)	FC Date	%	Re-accomplish Procurement process.	Complete	100	Award A/E contract.	May 2021	0
Recovery Action(s)	FC Date	%											
Re-accomplish Procurement process.	Complete	100											
Award A/E contract.	May 2021	0											
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)													
No critical risks identified in May .													
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
L895-0001-T: End-user requirements change post design phase. Legacy Risk #: 1866	If the project scope changes during execution because there is a change in end-user or other line organization usage requirements then a redesign will be likely resulting in schedule and cost impacts. Risk Handling Strategy: Accept Probability: Somewhat Likely (50%) Worst Case Impacts: \$500.0K, 70 days	<div><div></div></div>	<div><div></div></div>	Risk Trigger: Change in project scope during execution, of which the W-LAN system and all system modifications are a large contributor. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Risk is accepted with no mitigation actions planned at this time.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May .	Mitigation Action(s)	FC Date	%	Risk is accepted with no mitigation actions planned at this time.	Ongoing	NA			
Mitigation Action(s)	FC Date	%											
Risk is accepted with no mitigation actions planned at this time.	Ongoing	NA											

SECTION B

	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
L-895, Fire Protection Infrastructure for Plateau Raw Water										
L895-0002-T: Procurement cycle is delayed. Legacy Risk #: 1863	If procurement bid cycle is delayed because of excessive RFP questions, delay in receipt of bids, vendor supply issues, new procurement thresholds or processes, or quality concerns then additional procurement cycle time may be necessary impacting project schedule. Risk Handling Strategy: Accept Probability: Somewhat Likely (50%) Worst Case Impacts: \$0, 48 days			Risk Trigger: Delays to award A/E services contract. <table><tr><td>Mitigation Action(s)</td><td>FC Date</td><td>%</td></tr><tr><td>HMIS Procurements negotiate with A/E firm.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: HMIS has received several BAFO submittals from Jacobs and is currently moving to award the A/E contract in May 2021.	Mitigation Action(s)	FC Date	%	HMIS Procurements negotiate with A/E firm.	Ongoing	NA
Mitigation Action(s)	FC Date	%								
HMIS Procurements negotiate with A/E firm.	Ongoing	NA								
Unassigned Risks (Pending ownership of identified risks/opportunities)										
L895-0015-T: Ambient Air Boundary on Hanford. Legacy Risk #: 3219	HMIS Comment: Department of ecology rejected the L-895 NOC based on the ambient air boundary as prescribed by DOE. A combined NOC application is now being pursued for projects L-897, L-895, L-850, L-849, L-826, and L-781 due to recent communication from DOE and Ecology to group or otherwise combine multiple projects. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting Construction Mobilization, Water to Grid, and Project Complete. Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers is currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities. Risk currently realized: BCR processed in the month of May to push NOC approval to August. The public notice of public comment period is scheduled for 6/10/2021.									



5.7 HMIS L-897 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** A risk analysis was performed on L-897 in December 2020 in support of the development of a Critical Decision (CD) Implementation Approach document and Project Data Sheet (PDS).
- **Current Risk Posture:**





Table B-14. L-897 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	1	2	0	0	3	37
May	1	2	0	0	3	37

Table B-15. L-897 Key Risks

	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
L897 - Central Plateau Water Treatment Facility - Project Risks																
Explanation of major changes to the program monthly spotlight chart: No major changes to the Stoplight Chart in May.																
Realized Risks (Risks that are currently impacting project cost/schedule)																
L897-0015-T: Procurement bid cycle delays. Legacy Risk #: 2052	If procurement bid cycle is delayed because of excessive RFP questions, delay in receipt of bids, vendor supply issues, or quality concerns then additional procurement cycle time may be necessary impacting project schedule. Risk Handling Strategy: Mitigate Probability: Likely (75%) Worst Case Impacts: 48 days			<p>Risk Event: Membrane vendor does not agree with the Terms and Conditions of HMIS's service contract, delaying the membrane procurement process.</p> <table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>HMIS Procurements negotiate with vendor.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Award membrane and processing equipment procurement & fabrication contract (L897-6520A6).</td><td>06/2021</td><td>41</td></tr><tr><td>Notice to commence manufacture (L897-1404).</td><td>08/2021</td><td>0</td></tr></table> <p>Recovery Action Assessment: No major changes in the month of May. On 1/25/2021 HMSEC restarted the procurement process with the membrane vendor leading to a revised procurement schedule. Terms and conditions discussions are ongoing. HMIS new lower procurement notification thresholds, and negotiations of Terms and Conditions are driving a projected delay in Membrane Contract award and downstream install activities. BCR processed in the month of May to incorporate impacts known to date for future BCWS.</p>	Recovery Action(s)	FC Date	%	HMIS Procurements negotiate with vendor.	Ongoing	NA	Award membrane and processing equipment procurement & fabrication contract (L897-6520A6).	06/2021	41	Notice to commence manufacture (L897-1404).	08/2021	0
Recovery Action(s)	FC Date	%														
HMIS Procurements negotiate with vendor.	Ongoing	NA														
Award membrane and processing equipment procurement & fabrication contract (L897-6520A6).	06/2021	41														
Notice to commence manufacture (L897-1404).	08/2021	0														

SECTION B

Unmitigated Risk Impacts	Assessment		Comments																		
	Month	Trend																			
L897 - Central Plateau Water Treatment Facility - Project Risks																					
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																					
L897-0017-T: Change orders, RCIs, DCNs or change orders. Legacy Risk #: 2054	If there is an abnormal amount of change orders, Request for Clarification or Information (RCIs), Design Change Notices (DCNs), or change orders, then project will be impacted. Risk Handling Strategy: Accept Probability: Somewhat Likely (50%) Worst Case Impacts: \$300K, 48 days		 Risk Trigger: Abnormal amount of RCIs, DCNs or change orders will increase project schedule and create delays <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Complete a sound and well written FRDC, encourage detail from all reviewers.</td><td>Complete</td><td>100</td></tr><tr><td>Develop a well written SOW that clearly details the scope and end result of the project.</td><td>Complete</td><td>100</td></tr><tr><td>Encourage questions and exchanges during RFP that will eliminate change orders, RCIs and/or DCNs later. Clearly write in RFP the review times for change orders, RCIs and DCNs for all parties to limit delays in responses.</td><td>Complete</td><td>100</td></tr><tr><td>Maintain open communication with design/construction subcontractor to allow for exchanges to happen organically.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Provide change order, RCI and DCN responses within timeframe identified in RFP.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . There have been numerous communication issues with A/E reaching out to membrane vendor and incorporating the membrane specs into the project design. The project has implemented ongoing increased communication with the design and construction subcontractors to minimize future potential impacts. All change order, RCI, and DCN responses are provided within the timeframe identified in the RFP. The A/E didn't meet the FRDC water demand documented in Pall RCI 30, driving the necessity of a 4th membrane rack. Contracts continues being diligent on reviewing claims from the A/E and has requested back up to support the labor rates they are charging. MSA negotiated down the A/E labor claims resulting in November 2020's BCR VMSA-21-007.	Mitigation Action(s)	FC Date	%	Complete a sound and well written FRDC, encourage detail from all reviewers.	Complete	100	Develop a well written SOW that clearly details the scope and end result of the project.	Complete	100	Encourage questions and exchanges during RFP that will eliminate change orders, RCIs and/or DCNs later. Clearly write in RFP the review times for change orders, RCIs and DCNs for all parties to limit delays in responses.	Complete	100	Maintain open communication with design/construction subcontractor to allow for exchanges to happen organically.	Ongoing	NA	Provide change order, RCI and DCN responses within timeframe identified in RFP.	Ongoing	NA
Mitigation Action(s)	FC Date	%																			
Complete a sound and well written FRDC, encourage detail from all reviewers.	Complete	100																			
Develop a well written SOW that clearly details the scope and end result of the project.	Complete	100																			
Encourage questions and exchanges during RFP that will eliminate change orders, RCIs and/or DCNs later. Clearly write in RFP the review times for change orders, RCIs and DCNs for all parties to limit delays in responses.	Complete	100																			
Maintain open communication with design/construction subcontractor to allow for exchanges to happen organically.	Ongoing	NA																			
Provide change order, RCI and DCN responses within timeframe identified in RFP.	Ongoing	NA																			
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																					
L897-0016-T: Attrition, staffing reductions. Legacy Risk #: 2053	If attrition or staffing reductions result in staffing turnover during the project, then efficiency will be impacted, resulting in schedule delays. Risk Handling Strategy: Accept Probability: Somewhat Likely (26%) Worst Case Impacts: \$0, 48 days		 Risk Trigger: Key project position staff turnover may impact project schedule. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Identify key personnel during planning.</td><td>Complete</td><td>100</td></tr><tr><td>Establish back up and alternates for key project positions to reduce impacts.</td><td>Ongoing</td><td>NA</td></tr><tr><td>Maintain good documentation in the event a non-coordinated work turnover occurs.</td><td>Ongoing</td><td>NA</td></tr></table> Mitigation Action Assessment: No major changes in the month of May . With little exception, key personnel positions have alternates and project documentation has reduced the impact of staff attrition.	Mitigation Action(s)	FC Date	%	Identify key personnel during planning.	Complete	100	Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA	Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA						
Mitigation Action(s)	FC Date	%																			
Identify key personnel during planning.	Complete	100																			
Establish back up and alternates for key project positions to reduce impacts.	Ongoing	NA																			
Maintain good documentation in the event a non-coordinated work turnover occurs.	Ongoing	NA																			
Unassigned Risks (Pending ownership of identified risks/opportunities)																					
L897-0046-T: Ambient Air Boundary on Hanford. Legacy Risk #: 3220	HMIS Comment: Department of ecology rejected the L-895 NOC based on the ambient air boundary as prescribed by DOE. A combined NOC application is now being pursued for projects L-897, L-895, L-850, L-849, L-826, and L-781 due to recent communication from DOE and Ecology to group or otherwise combine multiple projects. Delays to NOC application approval due to needing additional time to modify the Best Available Control Technology/Toxic-Best Available Control Technology (BACT/T-BACT) analysis to include Selective Catalytic Reduction (SCR) and Diesel Particulate Filter (DPF) technologies, per Ecology's new direction, and to incorporate Volatile Organic Compounds/Ozone Depleting Substances (VOC/ODS) as identified in the recent Liquid Effluent Retention Facility (LERF) NOC application, also per Ecology's direction. This delay is impacting Construction Mobilization, Water to Grid, and Project Complete. Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers is currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities. The public notice of public comment period is scheduled for 6/10/2021.																				

SECTION B

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
L897 - Central Plateau Water Treatment Facility - Project Risks				
L897-0043-T: Delayed External Review and Approval Cycles. Legacy Risk # L897-0004-T (2051)	HMIS Comment: Project L-897 has been defined as a potential Reportable General Plant Project (GPP). As the project has progressed and become more defined, the Total Estimated Cost (TEC) is now expected to exceed the GPP threshold of \$20M. Due to this, L-897 is now required to be executed as a Capital Line Item Project consistent with the principles and provisions in DOE 413.3B "Program and Project Management for the Acquisition of Capital Assets". During the development of the Project Data Sheet (PDS), it was established that Risk # L897-0004-T was not within HMIS’s ability to manage and the risk was tentatively transferred to DOE-RL, pending official transfer and acceptance via correspondence control and DOE-RL. Ecology has indicated that they have not completed their NOC internal review and initiated the public comment period. One of the positions for the reviewers is currently vacant, and it is assumed they would need to include the Nuclear Waste Program Manager (i.e., Richland Office Program Manager). Ecology presumes that this individual is very busy and is getting up to speed on things as they are a new employee. This delay is forecast to impact NOC approval by 12-weeks. Delays in NOC approval from Department of Ecology could drive cost impacts in commodities.			
L897-0044-T: Hanford Site Incident. Legacy Risk # L897-0022-T (2067)	HMIS Comment: Project L-897 has been defined as a potential Reportable General Plant Project (GPP). As the project has progressed and become more defined, the Total Estimated Cost (TEC) is now expected to exceed the GPP threshold of \$20M. Due to this, L-897 is now required to be executed as a Capital Line Item Project consistent with the principles and provisions in DOE 413.3B "Program and Project Management for the Acquisition of Capital Assets". During the development of the Project Data Sheet (PDS), it was established that Risk # L897-0022-T was not within HMIS’s ability to manage and the risk was tentatively transferred to DOE-RL, pending official transfer and acceptance via correspondence control and DOE-RL.			



5.8 HMIS L-934 Project Key Risks

- **BCRs:** No BCRs were processed in **May** that impact the project's MR or SM profile.
- **Risk Analysis:** No risks analysis conducted in **May**.
- **Current Risk Posture:**

Table B-16. L-934 Risk Posture

Period	Realized	Key	Opened	Closed	Unassigned	Total Risks
April	-	-	-	-	-	-
May	0	1	0	0	4	9

Table B-17. L-934 Key Risks

Unmitigated Risk Impacts		Assessment		Comments									
		Month	Trend										
L934 – MSC Office Space Gap Reduction – 200E Area - Project Risks													
Explanation of major changes to the program monthly spotlight chart: No major changes to the Stoplight Chart in May.													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No Realized Risks in May.													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)													
L934-0021-T: Change orders, RCIs, DCNs or claim orders. Legacy Risk #: NA	If there is an abnormal amount of change orders, Request for Clarification or Information (RCIs), Design Change Notices (DCNs), or contractor claim orders, then project schedule and cost may be impacted. Risk Handling Strategy: Mitigate Probability: Likely (85%) Worst Case Impacts: \$517.0K, 24 days			Risk Trigger: Abnormal amount of change orders, RCIs, DCNs, contractor claim orders received. <table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Incorporate lessons learned from L-933.</td><td>Complete</td><td>100</td></tr><tr><td>Amend SOW and design reviews based on lessons learned.</td><td>Complete</td><td>100</td></tr></table> Mitigation Action Assessment: No major changes in the month of May.	Mitigation Action(s)	FC Date	%	Incorporate lessons learned from L-933.	Complete	100	Amend SOW and design reviews based on lessons learned.	Complete	100
Mitigation Action(s)	FC Date	%											
Incorporate lessons learned from L-933.	Complete	100											
Amend SOW and design reviews based on lessons learned.	Complete	100											
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
No High Risks identified in May.													
Unassigned Risks (Pending ownership of identified risks/opportunities)													
L934-0015-T: Unexpected waste site or radiological area discovered. Legacy Risk #: NA	If an unexpected waste site or radiological area is discovered, then project schedule will be impacted. HMIS Comment: In May, Sewer line excavation and installation over area of deeply buried process sewer line was completed without encountering rad contaminated soil.												
L934-0016-T: Cultural or historical artifacts are discovered. Legacy Risk #: NA	If cultural or historical artifacts are found during construction, then project schedule will be impacted. HMIS Comment: In May, Sewer line excavation and installation over area of deeply buried process sewer line was completed without encountering cultural or historical artifacts.												

SECTION B

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
L934 – MSC Office Space Gap Reduction – 200E Area - Project Risks				
L934-0018-T: Adverse weather impacts Legacy Risk #: NA	If there is more adverse weather (hot, windy, snow, smoke, and lightning) than initially planned, design and/or construction progress will slow to compensate for the environmental changes and schedule will suffer. HMIS Comment: In May , weather impacts were not reported.			
L934-0019-T: Process sewer line integrity failure Legacy Risk #: NA	If contaminated material is discovered during excavation because the process sewer line has leached/ruptured, then affected material will have to be mitigated impacting project schedule and cost. HMIS Comment: In May , Sewer line excavation and installation over area of deeply buried process sewer line was completed without encountering rad contaminated soil.			

6.0 BASELINE CHANGE REQUESTS

In May, HMIS approved and implemented the following two Reliability Project BCRs into the CPB:

- BCR-HMS-21-026 “Aligning Reliability Projects to Proposal Submittals, Execution Strategy, and Construction Execution Change Orders”
- BCR-HMS-21-027 “Implement Firm Fixed Price CLIN 7 Task Orders Invoicing Strategy”

The below table reflects upcoming BCRs.

Table B-18. Upcoming Baseline Change Requests

Project	BCR Scope	Target Implementation Month	Summary of Change
L-897	PMB	June-21	Add scope/schedule/budget for plumbing material procurement
L-861	PMB	June-21	Incorporate 60% design review impacts
L-907	PMB	June-21	Address conceptual design 30% design milestone impacts.
L-839	PMB	June-21	Replan Construction due to scope sequencing change. (East to West)
L-911	PMB	June-21	Detail Plan conceptual design activities
Various	PMB	June-21	Correct activities that span FY21/FY22 time-period.
L-838	PMB	June-21	Add design development scope to PMB

7.0 FUNDS ANALYSIS

Table B-19. IIP Funding Status for Reliability Project

HMIS FY 2021 Integrated Investment Portfolio Funding Status Reliability Project - May FY 2021 (\$000)													
CLIN	Task Order	Fund Source	IIP FYTD	FYTD ACWP	Spending Variance	* Funds Received	Remaining Available Funds	** RL Expected Funding	Total EAC	Uncosted Balance	Encum Carryover	Hold Backs	Unencum Balance
CLIN 4	N/A	RL-0020	240.2	118.8	121.4	523.5	404.7	2,034.0	509.5	1,524.5	1,615.2		(90.7)
CLIN 4	N/A	RL-0201	8,237.8	6,693.7	1,544.1	28,458.0	21,764.3	42,572.7	18,023.4	24,549.3	6,845.3	17,704.0	-
CLIN 7	RPTO-008	RL-0020	281.2	363.4	(82.2)	402.5	39.1	491.3	479.8	11.5		11.5	-
CLIN 7	RPTO 002	RL-0201	2,106.7	2,307.9	(201.2)	3,890.3	1,582.4	14,253.8	6,834.0	7,419.8	7,053.8		366.0
CLIN 7	RPTO 005	RL-0201	1,775.8	1,413.8	362.0	2,007.0	593.2	2,007.8	2,410.7	(402.9)			(402.9)
CLIN 7	RPTO 006	RL-0201	980.7	875.6	105.1	1,443.0	567.4	2,267.8	1,694.5	573.3	502.9		70.4
CLIN 7	RPTO 007	RL-0201	574.1	336.9	237.2	920.0	583.1	1,993.1	2,523.6	(530.5)			(530.5)
CLIN 7	RPTO 008	RL-0201	189.2	242.6	(53.4)	268.5	25.9	260.9	304.5	(43.6)			(43.6)
CLIN 7	RPTO TBD	RL-0201		0.1	(0.1)		(0.1)	1,048.0	5.2	1,042.8			1,042.8
CLIN 7	UF	RL-0201			-		-	516.4		516.4		1,018.6	(502.2)
CLIN 7	Fee / Adj	RL-0201			-		-	1,787.8	1,787.8	-			-
		TOTAL	14,385.7	12,352.8	2,032.9	37,912.8	25,560.0	69,233.6	34,573.0	34,660.6	16,017.2	18,734.1	(90.7)

* Funds received through Contract Mod P00071 dated June 10, 2021

** RL Expected Funding thru CBAG Rev 2 - Pending approval of Integrated Investment Portfolio. Includes reductions to be identified by DOE-RL in CBAG Rev 3. These potential reductions of \$9.2M have been identified in the RL Expected Funding, Outlook and Hold Backs.

Spending Variance Analysis: The variance in CLIN 4 is primarily due to Project L-927, Gable East Footprint Reduction that has experienced delays with Engineering Change Notice and delay in the Solar Power System needs and requirements which in turn is delaying construction and procurement activities. The underrun in RL-0201 (Reliability Project - CLIN 7) is primarily due to the change in execution and payment structure of Project L-934, MSC Office Space Gap Reduction and Project L-801, Upgrade SCADA.

Uncosted Balance: The \$34.7M uncosted balance is primarily due to L-612, 230kV Transmission System Reconditioning and Sustainability Repairs in which \$15.2M being held back pending DOE-RL direction and is funding specifically held for Project L-612. There is \$3.5M held for risk reserve. A portion of the uncosted balance is for Encumbered Carryover scope totaling \$16.0M that will complete in FY22.

Table B-20. Key Milestones

TO	Project	Description	Initial Submittal Date*	Forecast Date
RPTO-002	L-839, L-850, L-897	Task Order Submittal		5/25/21
RPTO-005	L-934	Task Order Submittal	4/08/21	6/3/21
RPTO-006	L-894, L-895	Task Order Submittal	4/27/21	
RPTO-007	L-801, L-905	Task Order Submittal		6/24/21
RPTO-008	L-921	Task Order Submittal		

* Submitted TO proposals have not yet been accepted by DOE-RL.

8.0 MAJOR ISSUES

The Water Projects Notice of Construction Approval Order has been delayed to August 19, 2021. This will delay tie in of the diesel generator for Project L-895 and mobilization of the construction subcontractors for Projects L-850 and L-897. HMIS continues to work with DOE and Washington State Department of Ecology (WDOE) to determine if work arounds can be found to allow activities to start prior to the approval order being received.

Finalizing Negotiations with Pall to allow award of Contract for Membrane Filtration Equipment for Project L-897. This procurement is now critical path for Project L-897. The Project has initiated discussions with Pall related to accelerated delivery of the equipment. In addition, the Project has requested that the Construction Subcontractor evaluate alternative sequencing of work to offset or eliminate any schedule impacts associated with delayed delivery of the filtration equipment.

Finalizing and agreeing to terms and conditions to allow award of Engineering Contract to Jacobs to support Projects L-894 and L-895. Expect to have this issue resolved in early June, the subcontractor will be asked to provide options for recovering schedule.

HMIS has made notifications to DOE and WDOE that there were Washington Administrative Code Violations associated with diesel generators used on Gable Mountain.

Project L-895 was notified that the installed National Electrical Manufacturers Association (NEMA) 3R Switchgear Enclosures were not suitable for the environment. The construction specification specified NEMA 4 Enclosures. A root cause analysis is being performed.

COVID-19 Quarantines have slowed progress for Project L-789, schedule recovery was expected in June but may slip into July. The Project continues to work with the construction subcontractor

and appropriate utility organizations to perform outages and work overtime (as allowed) to ensure Project completion.

9.0 DOE ACTIONS/DECISIONS

Obtain Water Projects NOC Approval Order by 8/19/21

Provide L-897 CD-02/3 Approval by 8/19/21

Provide comments on L-888 Notice of Construction and Health Impacts Assessment by 6/17/21

10.0 GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

See Section 8.0, *DOE Actions/Decisions*

11.0 RELIABILITY PROJECTS

Additional Reliability Project specific information/data is available upon request.

Appendix A

Contract Performance Reports

Format 1 – Work Breakdown Structure

Format 3 – Baseline

Format 5 – Explanation and Problem Analysis

APPENDIX A

1.0 FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE												DOLLARS IN Thousands			FORM APPROVED OMB No. 0704-0188		
1. CONTRACTOR		2. CONTRACT		3. PROGRAM				4. REPORT PERIOD									
a. NAME Hanford Mission Integration Solutions		a. NAME Hanford Mission Essential Services Contract		a. NAME Hanford Mission Essential Services Contract				a. From 2021/04/26									
b. LOCATION (Address and Zip Code) Richland, WA 99352		b. NUMBER 89303320DFEM000031		b. PHASE Operations				b. To 2021/05/23									
c. TYPE CR, CPAF & IDIQ		d. SHARE RATIO N/A		c. EVMS ACCEPTANCE No X Yes													
5. CONTRACT DATA																	
a. QUANTITY		b. NEGOTIATED COST		c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		d. TARGET PROFIT/FEE		e. TARGET PRICE		f. ESTIMATED PRICE		g. CONTRACT CEILING		h. ESTIMATED CONTRACT CEILING		i. DATE OF OTS/OTS	
N/A		\$3,760,411		\$80,458		\$251,639		\$4,012,050		\$4,098,984		4,012,050		4,098,984		N/A	
6. ESTIMATED COST AT COMPLETION																	
				CONTRACT BUDGET BASE (2)		VARIANCE (3)		a. NAME (Last, First, Middle Initial) Wilkinson, Robert E				b. TITLE President & General Manager					
a. BEST CASE				\$3,840,869				c. SIGNATURE ROBERT WILKINSON (Affiliate)				d. DATE SIGNED Digitally signed by ROBERT WILKINSON (Affiliate) Date: 2021.08.28 05:11:31 -0700					
b. WORST CASE				\$4,039,712													
c. MOST LIKELY				\$3,847,345		3,840,869		(6,476)									
B. PERFORMANCE DATA																	
Item (1)	Current Period					Cumulative to Date					At Completion						
	Budgeted Cost Work Scheduled (2)	Work Performed (3)	Actual Cost Work Performed (4)	Variance Schedule (5)	Cost (6)	Budgeted Cost Work Scheduled (7)	Work Performed (8)	Actual Cost Work Performed (9)	Variance Schedule (10)	Cost (11)	Budgeted (12)	Estimated (13)	Variance (14)				
a. WORK BREAKDOWN STRUCTURE ELEMENT																	
4001.01.01 - Contract Transition	0	0	44	0	(44)	6,405	6,405	5,684	0	721	6,405	5,684	721				
CLIN 1 Subtotal	0	0	44	0	(44)	6,405	6,405	5,684	0	721	6,405	5,684	721				
4001.03.01 - Legacy Benefit Plans	3,444	3,444	2,490	0	954	14,429	14,429	8,500	0	5,929	448,037	439,025	9,013				
CLIN 3 Subtotal	3,444	3,444	2,490	0	954	14,429	14,429	8,500	0	5,929	448,037	439,025	9,013				
4001.04.01 - Utilities & Infrastructure	2,999	2,999	2,573	0	426	12,749	12,749	11,141	0	1,607	326,188	325,395	893				
4001.04.02 - Transportation	52	52	37	0	15	169	169	153	0	16	405	353	52				
4001.04.03 - Safeguards & Security	4,857	4,837	5,448	(20)	(611)	19,978	20,084	22,575	105	(2,497)	579,225	581,350	(8,125)				
4001.04.04 - Emergencies & First Responders	2,948	2,948	2,590	0	358	12,352	12,352	11,065	0	1,287	291,240	289,621	1,619				
4001.04.05 - Training & Workforce Readiness	828	828	685	(0)	143	3,470	3,470	2,943	0	527	98,449	99,848	(1,400)				
4001.04.06 - Information Technology & Mgmt	3,004	2,959	2,005	(44)	954	12,479	12,422	10,008	(57)	2,471	280,792	280,831	(39)				
4001.04.07 - Business Services	910	910	497	(0)	413	3,811	3,811	2,986	0	825	118,420	118,186	234				
4001.04.08 - Real Property Asset Mgmt	1,387	1,263	1,231	(124)	33	5,674	5,387	6,288	(287)	(901)	135,608	139,100	(3,492)				
4001.04.09 - Environmental Stewardship & Mgmt	604	604	458	0	146	2,055	2,055	1,880	0	176	45,713	45,006	707				
4001.04.10 - Environmental Integration	1,734	1,734	1,152	0	581	7,264	7,264	6,224	0	1,039	195,811	194,656	1,155				
4001.04.11 - Safety & QA	1,743	1,743	1,538	(0)	205	7,734	7,734	8,213	0	(479)	252,083	253,376	(1,293)				
4001.04.12 - General Performance Requirements	3,798	4,649	4,806	851	(157)	14,624	14,624	14,676	0	(52)	255,460	256,438	(978)				
4001.07.01 - IRP - Water System	463	359	300	(104)	58	2,649	1,464	1,350	(1,185)	114	5,774	5,678	96				
4001.07.02 - IRP - Sewer System	43	16	19	(27)	(3)	128	65	54	(64)	11	133	97	35				
4001.07.03 - IRP - Electrical System	1,476	1,373	1,276	(104)	97	4,836	3,058	3,210	(1,778)	(151)	8,260	8,082	178				
4001.07.04 - IRP - Roads & Grounds	(11)	2	2	14	(0)	68	68	129	0	(61)	68	5,300	(5,232)				
4001.07.05 - IRP - Facility System	340	187	213	(153)	(26)	909	726	705	(183)	20	3,491	3,876	(385)				
4001.07.06 - IRP - Network & Telecom System	724	194	104	(531)	90	2,311	573	483	(1,738)	89	5,828	5,270	557				
CLIN 4 Subtotal	27,898	27,655	24,933	(243)	2,722	119,255	108,073	104,085	(5,182)	3,989	2,597,047	2,612,463	(15,416)				
4001.05.01 - DOE Small Business Pre-Award Support	19	19	42	0	(23)	62	62	42	0	21	2,419	2,390	28				
CLIN 5 Subtotal	19	19	42	0	(23)	62	62	42	0	21	2,419	2,390	28				
4001.07.01 - IRP - Water System	488	778	844	290	(65)	2,544	2,891	3,184	347	(292)	15,245	15,894	(649)				
4001.07.03 - IRP - Electrical System	91	(384)	(178)	(476)	(207)	687	140	337	(547)	(197)	2,327	2,524	(197)				
4001.07.05 - IRP - Facility System	408	217	249	(191)	(32)	1,390	1,390	1,414	0	(24)	2,387	2,411	(24)				
4001.07.06 - IRP - Network & Telecom System	0	4	47	4	(44)	688	593	606	(94)	(13)	1,764	1,862	(98)				
4001.07.97 - IRP - Out-Year Summary Level Planning Package	0	0	0	0	0	0	0	0	0	0	339,402	338,574	828				
CLIN 7 Subtotal	988	614	962	(374)	(348)	5,309	5,015	5,541	(293)	(525)	361,125	361,265	(140)				
4001.08.01 - DOE Directed Work Scope	461	461	379	0	82	1,933	1,933	1,458	0	475	2,907	3,819	(911)				
4001.08.03 - Portfolio Management Task Orders	0	0	0	0	0	21	21	13	0	8	21	13	8				
4001.08.97 - Out-Year Summary Level Planning Package	0	0	0	0	0	0	0	0	0	0	207,574	207,352	222				
CLIN 8 Subtotal	461	461	379	0	82	1,954	1,954	1,471	0	483	210,502	211,184	(682)				
b. COST OF MONEY																	
c. GENERAL AND ADMINISTRATIVE																	
d. UNDISTRIBUTED BUDGET																	
e. SUBTOTAL																	
f. MANAGEMENT RESERVE																	
g. TOTAL																	
h. RECONCILIATION TO CONTRACT BUDGET BASE																	
a. VARIANCE ADJUSTMENT																	
b. TOTAL CONTRACT VARIANCE																	

APPENDIX A

2.0 FORMAT 3, DD FORM 2734/3, BASELINE

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE														DOLLARS IN Thousands		FORM APPROVED OMB No. 0704-0188	
1. Contractor		2. Contract			3. Program				4. Report Period								
a. Name Hanford Mission Integration Solutions		a. Name Hanford Mission Essential Services Contract			a. Name Hanford Mission Essential Services				a. From (2021/04/26)								
b. Location (Address and Zip Code) Richland, WA 99352		b. Number 89303320DEM000031			b. Phase Operations				b. To (2021/05/23)								
c. TYPE CR, CPAF & IDIQ		d. Share Ratio N/A			c. EVMS ACCEPTANCE No X Yes												
5. CONTRACT DATA																	
a. ORIGINAL NEGOTIATED COST \$3,750,727		b. NEGOTIATED CONTRACT CHANGES \$9,684		c. CURRENT NEGOTIATED COST (a+b) \$3,760,411		d. ESTIMATED COST OF UNAUTHORIZED UNPRICED WORK \$80,458			e. CONTRACT BUDGET BASE (C+D) \$3,840,869		f. TOTAL ALLOCATED BUDGET \$3,840,869		g. DIFFERENCE (E - F) \$0				
h. CONTRACT START DATE 2020/8/17		i. CONTRACT DEFINITIZATION DATE 2019/12/5			j. PLANNED COMPLETION DATE 2030/8/16			k. CONTRACT COMPLETION DATE 2030/8/16		l. ESTIMATED COMPLETION DATE 2030/8/16							
6. PERFORMANCE DATA																	
ITEM (1)	BCWS CUMULATIVE TO DATE (2)	BCWS FOR REPORT PERIOD (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)											UNDISTRIBUTED BUDGET (15)	TOTAL BUDGET (16)		
			Six Month Forecast By Month						Remaining Forecast By Month & Fiscal Year								
			JUN FY21 (4)	JUL FY21 (5)	AUG FY21 (6)	SEP FY21 (7)	OCT FY22 (8)	NOV FY22 (9)	Remaining FY22 (10)	BP FY23-25 (11)	OP1 FY25-28 (12)	OP2 FY28-30 (13)					
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	108,604	34,407	33,142	40,111	32,984	48,470	19,023	24,573	249,643	876,528	946,155	1,215,010		215,003	3,843,654		
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	(0)	(1,597)	(1,663)	(3,855)	(2,935)	75	725	1,684	6,443	0	0	(1,992)		331	(2,785)		
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)	108,604	32,810	31,479	36,255	30,048	48,546	19,748	26,257	256,086	876,528	946,155	1,213,018		215,335	3,840,869		
7. MANAGEMENT RESERVE														0	0		
8. TOTAL	108,604	32,810	31,479	36,255	30,048	48,546	19,748	26,257	256,086	876,528	946,155	1,213,018		215,335	3,840,869		

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031 c. Type CR, CPAF,IDIQ d. Share Ratio	b. Phase - Operations c. EVMS Acceptance NO X YES	b. To (2021/05/23)
Evaluation			

3.0 FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM ANALYSIS

(\$K) - May	BCWS	BCWP	ACWP	SV \$	SV %	CV \$	CV %	SPI	CPI
Current:	\$ 32,810	\$ 32,193	\$ 28,851	\$ (616)	-1.9%	\$ 3,343	10.4%	0.98	1.12
Cumulative:	\$ 141,414	\$ 135,939	\$ 125,323	\$ (5,475)	-3.9%	\$10,617	7.8%	0.96	1.08
	BAC	EAC	VAC \$	VAC %	TCPI				
At Completion:	\$3,840,869	\$3,847,345	\$ (6,476)	-0.2%	1.00				

Explanation of Variance /Description of Problem:

Current Month (CM) Cost Variance (CV):

The favorable CM CV is \$3,343K or 10.4% primarily driven by:

(+\$954K) 4001.03.01 - Legacy Benefit Plans - The favorable CM CV is primarily due to an incorrect P-Card entry, invoicing during the contract startup, transitioning of plans from prior entity, and claims being lower than planned.

(+\$426K) 4001.04.01 - Utilities & Infrastructure – The favorable CM CV is primarily due road patching, paving and road service budgets were level-loaded but most of the work occurs during summer months.

(-\$611K) 4001.04.03 - Safeguards & Security – The unfavorable variance is primarily due to labor overruns driven by the exclusion of non-standard shifts in the budget for Security Patrol Officers (SPO). Other variances include subcontract spending on the development of Personnel Security software applications for Security PIV and Reliability Program records tracking; bulk records declassification to reduce the quantity of classified holdings onsite; and administrative, project management, and IT support.

(+\$358K) 4001.04.04 - Emergencies & First Responders – The favorable variance is primarily due non-cash credits received for fire and emergency support services provided to Energy Northwest. To date, value for the HFD provided service has not been implemented into the contract baseline. Other variances include reductions in IT costs for transfer of scope to North Wind and offsetting labor and subcontract deltas.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031 c. Type CR, CPAF,IDIQ d. Share Ratio	b. Phase - Operations c. EVMS Acceptance NO X YES	b. To (2021/05/23)
Evaluation			

(+\$954K) 4001.04.06 - Information Technology & Mgmt. – The favorable CM CV is primarily due to underruns experienced from planned NorthWind costs. NorthWind management charge to various non-PMB accounts across Information Management causing underruns on the direct scope. Other variances include a delay in hiring for Material Difference FTEs and the software license budget being level-loaded rather than time-phased for the correct period in which the invoice will be received.

(+\$413K) 4001.04.07 - Business Services – The favorable CM CV is due to General Supplies Inventory (GSI) buys and sells resulting in a positive variance when material sales are greater than the current buys. This favorable variance is partially offset by Personal Property & Material Mgmt. Program higher than planned staffing levels.

(+\$581K) 4001.04.10 - Environmental Integration - The favorable CTD CV is primarily in labor due to staff supporting Work For Others (WFOs), Reliability Projects (RPs) and staff absences.

Impacts – N/A.

Corrective Action – N/A.

Current Month (CM) Schedule Variance (SV):

The unfavorable CM SV is (-\$616K) or (-1.9%) primarily driven by:

(+\$851K) 4001.04.12 - General Performance Requirements – The favorable CM SV is due to receiving EC & EF Equipment in the current month that was planned to be received in a prior month.

(-\$580K) 4001.07.03 - IRP - Electrical System - L-801, Upgrade SCADA performance measurement baseline (PMB) was changed via a Baseline Change Request (BCR) to reflect the proposed Firm-fixed Price milestone payment schedule of values as submitted in RPTO-007. The BCR required a point adjustment during the current period. (-\$476K)

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031 c. Type CR, CPAF,IDIQ d. Share Ratio	b. Phase - Operations c. EVMS Acceptance NO X YES	b. To (2021/05/23)
Evaluation			

(-\$344K) 4001.07.06 - IRP - Network & Telecom System - L-934, Office Space Gap Reduction – CM unfavorable SV is due to the realization of BCWS in the current period for construction scope that was completed in a prior period ahead of schedule.

(-\$527K) 4001.07.06 - IRP - Network & Telecom System - L-937, Gabe East Footprint Reduction (Phase 1) Engineering Change Request driving schedule impacts to RSC and Solar Array procurement and construction activities. ECR forecasted to complete in June.

Impacts – N/A.

Corrective Action –N/A.

Cumulative To Date (CTD) Cost Variance (CV):

The favorable CTD CV is \$10,617K or 7.8% primarily driven by:

(+\$5,929K) 4001.03.01 – Legacy Benefit Plans – The favorable cost variance due to an incorrect P-Card entry, timing of invoices per contract startup, transitioning of plans from prior entity, and claims being less than planned.

(+2,413K) 4001.04.06 – Information Technology & Mgmt. - Savings associated with most of the Information Technology scope and all the records scope transferring to North Wind Services rather than internal labor. Other variances include a delay in hiring for Material Difference FTEs and the software license budget being level-loaded rather than time-phased for the correct period in which the invoice will be received.

(+\$1,607K) 4001.04.01 – Utilities and Infrastructure – Road patching, paving and road service budgets were level-loaded but most of the work occurs during summer months.

(+\$1,287K) 4001.04.04 – Emergencies & First Responders - The favorable variance is primarily due time phasing of material and equipment costs for consumables supporting level of effort scope, reduced IT costs to transition of scope to North Wind, and non-cash credits received for fire and emergency services provided to Energy Northwest. Other variances include offsetting labor and subcontract deltas. Labor overruns are due to the exclusion of non-standard shifts in the budget for platoon firefighter resources, and the subcontract underrun is primarily due the material difference for increased platoon staffing.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031 c. Type CR, CPAF,IDIQ d. Share Ratio	b. Phase - Operations c. EVMS Acceptance NO X YES	b. To (2021/05/23)
Evaluation			

(+\$721K) 4001.01.01 - Contract Transition - The favorable CTD CV is primarily due to an underrun in transition contract value. Final transition costs are still expected from the MSA corporate account transfer to HMIS CLIN 1.

(-\$2,492K) 4001.04.03 - Safeguards & Security - The unfavorable variance is primarily due to labor overruns driven by the exclusion on non-standard shifts in the budget for SPO's, the exclusion of a Security and Emergency Services Project Management Account, and short budget for existing Security Professional resources. Other variances include subcontract costs for intrusion detection systems IT support; Design Basis Threat and Security Analysis program support; development of Personnel Security software applications for Security PIV and Reliability Program records tracking; and bulk records declassification to reduce the quantity of classified holdings onsite.

(+\$825K) 4001.04.07 - Business Services – The favorable CM CV is due to General Supplies Inventory (GSI) buys and sells resulting in a positive variance when material sales are greater than the current buys. This favorable variance is partially offset by Personal Property & Material Mgmt. Program higher than planned staffing levels.

(-\$901K) 4001.04.08 - Real Property Asset Mgmt. – The unfavorable CTD CV is due to the MMP Software Upgrades is costing more than planned due to the complexity of the software integration. Also, Work Management is overrunning due to the implementation of a new subcontractor and cost associated with the start-up.

(+\$1,039K) 4001.04.10 - Environmental Integration - The favorable CTD CV is primarily in labor due to staff supporting Work For Others (WFOs), Reliability Projects (RPs) and staff absences.

Impacts – N/A.

Corrective Action – N/A.

Cumulative To Date (CTD) Schedule Variance (SV):

The unfavorable CTD SV is (-\$5,475K) or (-3.9%) primarily driven by:

(-\$838K) 4001.07.01 Water Systems - Project L-897 Central Plateau Water Treatment Facility, delays in the awarding the membrane and processing equipment fabrication/procurement subcontract due to having to go through the full procurement

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031 c. Type CR, CPAF,IDIQ d. Share Ratio	b. Phase - Operations c. EVMS Acceptance NO X YES	b. To (2021/05/23)
Evaluation			

process. Project L-895 Fire Protection Infrastructure for PRW, delay in the awarding the A/E services subcontract due to having to go through the full procurement process

(-\$1,932K) 4001.07.06 - Network & Telecom Systems

Project L-937 Gable East Footprint Reduction (Phase 1) continuing to recover from the pause at contract transition. The project team implemented the prior months' workscope and did not perform the baseline work scheduled. Authorization to perform work was received on February 8th, two weeks after the HMIS contract had begun. The project has also experienced delays with RSC design tasks, with the Engineering Change Request (ECR) development taking longer to complete, procurement receipts, and is holding up construction activities that were scheduled to start in March.

(-\$2,324K) 4001.07.03 - Electrical System

Project L-789, Priority T&D Sys Wood PP Test & Replace, having low likelihood planning and unplanned cutovers as well as Titan crews being dispatched to support power outages in Oregon. In addition, the subcontractor is performing outstanding change order scope that has delayed the existing planned schedule. Project L-801, Upgrade SCADA was converted to a firm fixed price payment schedule in the current period via BCR. The project was unable to earn performance for Remote Terminal Unit (RTU) Install #1 and RTU CAT #3 milestones due to ongoing efforts to define completion criteria documentation prior to submitting to DOE.

Impacts – N/A

Corrective Action – N/A.

Variance at Complete (VAC):

The unfavorable VAC is (-\$6,476K) or (-0.2%) primarily driven by:

(+\$9,013K) 4001.03.01 - Legacy Benefit Plans - The favorable VAC is primarily due to Fernald, Mound, and Rocky Flat legacy benefits claims costs projected to be lower than the budgeted.

(-\$8,125K) 4001.04.03 – Safeguards & Security - The unfavorable VAC is primarily due to Non-Standard Shift Schedules for Patrol & Fire personnel not being bid in the proposal thus creating an overrun at completion.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/05/23)
	c. Type CR, CPAF,IDIQ	d. Share Ratio	
		c. EVMS Acceptance NO X YES	
Evaluation			

(-\$3,492K) 4001.04.08 – Real Property Asset Management - The unfavorable VAC is primarily due to the budget baseline diverging from funding targets for FY21 associated with Conduct of Maintenance, Fire Systems Maintenance, and Work Management. The additional cost for this scope is creating an overrun at completion.

(-\$5,232K) 4001.07.04 – IRP Roads & Grounds - The unfavorable VAC is primarily due construction scope being removed from Performance Measurement Baseline (PMB) via BCR, however spend forecast was still maintained in cost system.

Impacts – Overruns will continue due to the divergent between the budget baseline and the funding targets.

Corrective Action – Continue to monitor the EACs for possible cost reductions.

Negotiated Contract Changes:

The Negotiated Contract Cost for May 2021 is \$3,760.4M.

Changes in Estimated Cost of Authorized Unpriced Work:

The Authorized Unpriced Work (AUW) for May 2021 is \$80.5M based primarily on Material Differences (MDs).

Changes in Estimated Price:

The Estimated Price for May 2021 is \$4,099.0M. The Estimated Price includes the Most Likely Management Estimate at Completion (MEAC) of \$3,847.3M and fee totaling \$251.6M. The estimated fee includes assumed ~7% of Fee from CLINs 7&8 in the amount of ~\$39.9M. The fee is depended on Task Order (TO) negotiations and will be updated as necessary when TOs are definitized.

Changes in Undistributed Budget:

The UB for this reporting period is \$215.3M.

Changes in Management Reserve:

The Management Reserve (MR) for this reporting period is \$0M.

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)		a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031		b. Phase - Operations	b. To (2021/05/23)
	c. Type CR, CPAF,IDIQ	d. Share Ratio	c. EVMS Acceptance NO X YES	
Evaluation				

Differences in the Baseline:

This reporting period the Baseline began at \$3,843.7M and decreased to \$3,840.9M.

The following BCRs were implemented:

- BCR-HMS-21-021 - HMIS Execution Strategy Internal Replan
- BCR-HMS-21-022 - Replan EHR Project H-002
- BCR-HMS-21-023 - Update Baseline Plan for New Business Compliance Organizations
- BCR-HMS-21-024 - Implement RFSs through Contract Mod P00066
- BCR-HMS-21-025 - CLIN 6 Budget Reallocation Update for HLMI
- BCR-HMS-21-026 - Align Reliability Projects to Proposal Submittals, Execution Strategy, and Construction Execution Change Orders
- BCR-HMS-21-027 - Implement Firm Fixed Price CLIN 7 Task Orders Invoicing Strategy
- BCR-HMS-21-028 - Update Program Log for Contract Modification P00066 and Update RP Out-Year Planning Package

Best/Worst/Most Likely Management Estimate at Completion (MEAC):

The Best Case MEAC assumes the completion of the approved work scope at the current negotiated contract value consistent with the Contract Budget Base \$3,840.9M. The Most Likely MEAC reflects the EAC including MR, when established \$3,847.3M. The Worst Case Scenario assumes a 5 percent increase to the Most Likely MEAC case scenario \$4,039.7M.

Appendix B

Reliability Project Contract Performance Reports

Format 1 – Work Breakdown Structure

Format 3 – Baseline

Format 5 – Explanation and Problem Analysis

APPENDIX B

1.0 FORMAT 1, DD FORM 2734/1, WORK BREAKDOWN STRUCTURE

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE										DOLLARS IN Thousands		FORM APPROVED OMB No. 0704-0188	
1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD							
a. NAME Hanford Mission Integration Solutions		a. NAME Hanford Mission Essential Services Contract		a. NAME Hanford Mission Essential Services Contract		a. From 2021 / 04 / 26							
b. LOCATION (Address and Zip Code) Richland, WA 99352		b. NUMBER 89303320DEM000031		b. PHASE Operations		b. To 2021 / 05 / 23							
c. TYPE CPAF & IDIQ		d. SHARE RATIO N/A		c. EVMS ACCEPTANCE No X Yes									
5. CONTRACT DATA													
a. QUANTITY		b. NEGOTIATED COST		c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		d. TARGET PROFIT/FEE		e. TARGET PRICE		f. ESTIMATED PRICE		g. CONTRACT CEILING	
N/A		\$359,813		\$24,865		\$25,187		\$385,000		\$414,755		385,000	
												414,755	
												N/A	
6. ESTIMATED COST AT COMPLETION													
				CONTRACT BUDGET BASE (2)		VARIANCE (3)							
a. BEST CASE		\$384,678											
b. WORST CASE		\$409,046											
c. MOST LIKELY		\$389,568		384,678		(4,890)							
7. AUTHORIZED CONTRACTOR REPRESENTATIVE													
								a. NAME (Last, First, Middle Initial) Wilkinson, Robert E				b. TITLE President & General Manager	
								c. SIGNATURE ROBERT WILKINSON (Affiliate)				d. DATE SIGNED Digitally signed by ROBERT WILKINSON (Affiliate) Date: 2021.06.28 05:11:59 -07'00'	
8. PERFORMANCE DATA													
Item (1)	Current Period					Cumulative to Date					At Completion		
	Budgeted Cost		Actual Cost Work Performed (4)	Variance		Budgeted Cost		Actual Cost Work Performed (9)	Variance		Budgeted (12)	Estimated (13)	Variance (14)
	Work Scheduled (2)	Work Performed (3)		Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)		Schedule (10)	Cost (11)			
a. WORK BREAKDOWN STRUCTURE ELEMENT													
4001.07.01 - IRP - Water System	463	359	300	(104)	58	2,649	1,464	1,350	(1,185)	114	5,774	5,678	96
4001.07.02 - IRP - Sewer System	43	16	19	(27)	(3)	128	65	54	(64)	11	133	97	35
4001.07.03 - IRP - Electrical System	1,476	1,373	1,276	(104)	97	4,836	3,058	3,210	(1,778)	(151)	8,260	8,082	178
4001.07.04 - IRP - Roads & Grounds	(11)	2	2	14	(0)	68	68	129	0	(61)	68	5,300	(5,232)
4001.07.05 - IRP - Facility System	340	187	213	(153)	(26)	909	726	705	(183)	20	3,491	3,876	(385)
4001.07.06 - IRP - Network & Telecom System	724	194	104	(531)	90	2,311	573	483	(1,738)	89	5,828	5,270	557
CLIN 4 Subtotal	3,036	2,131	1,914	(905)	217	10,901	5,953	5,931	(4,948)	21	23,554	28,303	(4,750)
4001.07.01 - IRP - Water System	488	778	844	290	(65)	2,544	2,891	3,184	347	(292)	15,245	15,894	(649)
4001.07.03 - IRP - Electrical System	91	(384)	(178)	(476)	(207)	687	140	337	(547)	(197)	2,327	2,524	(197)
4001.07.05 - IRP - Facility System	408	217	249	(191)	(32)	1,390	1,390	1,414	0	(24)	2,387	2,411	(24)
4001.07.06 - IRP - Network & Telecom System	0	4	47	4	(44)	688	593	606	(94)	(13)	1,764	1,862	(98)
4001.07.97 - IRP - Out-Year Summary Level Planning Package	0	0	0	0	0	0	0	0	0	0	339,402	338,574	828
CLIN 7 Subtotal	988	614	962	(374)	(348)	5,309	5,015	5,541	(293)	(525)	361,125	361,265	(140)
b. COST OF MONEY													
c. GENERAL AND ADMINISTRATIVE													
d. UNDISTRIBUTED BUDGET													
e. SUBTOTAL													
	4,024	2,745	2,876	(1,279)	(131)	16,209	10,968	11,472	(5,241)	(504)	384,678	389,568	(4,890)
f. MANAGEMENT RESERVE													
g. TOTAL													
	4,024	2,745	2,876	(1,279)	(131)	16,209	10,968	11,472	(5,241)	(504)	384,678	389,568	(4,890)
9. RECONCILIATION TO CONTRACT BUDGET BASE													
a. VARIANCE ADJUSTMENT													
b. TOTAL CONTRACT VARIANCE													
											384,678	389,568	(4,890)

APPENDIX B

2.0 FORMAT 3, DD FORM 2734/3, BASELINE

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE															DOLLARS IN Thousands		FORM APPROVED OMB No. 0704-0188	
1. Contractor		2. Contract			3. Program				4. Report Period									
a. Name		a. Name			a. Name				a. From (2021/04/26)									
Hanford Mission Integration Solutions		Hanford Mission Essential Services Contract			Hanford Mission Essential Services													
b. Location (Address and Zip Code)		b. Number			b. Phase				b. To (2021/05/23)									
Richland, WA 99352		89303320DEM000031			Operations													
		c. TYPE		d. Share Ratio		c. EVMS ACCEPTANCE												
		CPAF & IDIQ		N/A		No X Yes												
5. CONTRACT DATA																		
a. ORIGINAL NEGOTIATED COST			b. NEGOTIATED CONTRACT CHANGES		c. CURRENT NEGOTIATED COST (a+b)		d. ESTIMATED COST OF UNAUTHORIZED UNPRICED WORK			e. CONTRACT BUDGET BASE (C+D)		f. TOTAL ALLOCATED BUDGET		g. DIFFERENCE (E - F)				
\$359,813			\$0		\$359,813		\$24,865			\$384,678		\$384,678		\$0				
h. CONTRACT START DATE			i. CONTRACT DEFINITIZATION DATE			j. PLANNED COMPLETION DATE			k. CONTRACT COMPLETION DATE		l. ESTIMATED COMPLETION DATE							
2020/8/17			2019/12/5			2030/8/16			2030/8/16		2030/8/16							
6. PERFORMANCE DATA																		
ITEM (1)	BCWS CUMULATIVE TO DATE (2)	BCWS FOR REPORT PERIOD (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)												UNDISTRIBUTED BUDGET (15)	TOTAL BUDGET (16)		
			Six Month Forecast By Month							Remaining Forecast By Month & Fiscal Year								
			JUN FY21 (4)	JUL FY21 (5)	AUG FY21 (6)	SEP FY21 (7)	OCT FY22 (8)	NOV FY22 (9)	Remaining FY22 (10)	BP FY23-25 (11)	OP1 FY25-28 (12)	OP2 FY28-30 (13)						
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	12,186	5,569	6,208	6,405	5,523	7,967	1,626	688	46	0	0	341,394		0	387,610			
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	0	(1,545)	(1,636)	(3,821)	(2,907)	117	725	1,684	6,443	0	0	(1,992)		0	(2,932)			
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)	12,186	4,024	4,572	2,583	2,616	8,084	2,351	2,372	6,489	0	0	339,402		0	384,678			
7. MANAGEMENT RESERVE												0		0	0			
8. TOTAL	12,186	4,024	4,572	2,583	2,616	8,084	2,351	2,372	6,489	0	0	339,402		0	384,678			

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/05/23)
	c. Type CPAF,IDIQ	d. Share Ratio	
		c. EVMS Acceptance NO X YES	
Evaluation			

3.0 FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM ANALYSIS

FORMAT 5, DD FORM 2734/5, EXPLANATIONS AND PROBLEM

(\$K) - May	BCWS	BCWP	ACWP	SV \$	SV %	CV \$	CV %	SPI	CPI
Current:	\$ 4,024	\$ 2,745	\$ 2,876	\$(1,279)	-31.8%	\$ (131)	-4.8%	0.68	0.95
Cumulative:	\$ 16,209	\$ 10,968	\$ 11,472	\$(5,241)	-32.3%	\$ (504)	-4.6%	0.68	0.96
	BAC	EAC	VAC \$	VAC %	TCPI				
At Completion:	\$ 384,678	\$ 389,568	\$ (4,890)	-1.3%	0.99				
Includes CLIN 4 & CLIN 7									

Explanation of Variance /Description of Problem:

Current Month (CM) Cost Variance (CV):

The CM unfavorable CV of (-\$131K) or (-4.8%) is primarily due to:

Cost impacts to IRP – Electrical System projects (4001.07.03)

L-801, Upgrade SCADA CM unfavorable cost variance is due to further pending cost transfers that are a continuation of those completed during the current period. Several resources such as training costs are still pending cost transfer and will be completed in the next fiscal month. In parallel with the BCR being completed to remove previous activities and replan L-801 using milestone payment schedule of values under RPTO-007, cost transfers were executed to align PMB ACWP with proposed milestone payment values. Upon completion of milestones, payment values will be accrued for firm-fixed price invoicing to DOE. (-\$172K)

Impacts – N/A.

Corrective Action – N/A.

Current Month (CM) Schedule Variance (SV):

The unfavorable CM SV of (-\$1,279K) or (-31.8%) is primarily driven by:

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031 c. Type CPAF,IDIQ	b. Phase - Operations c. EVMS Acceptance NO X YES	b. To (2021/05/23)
Evaluation			

Schedule impacts to IRP – Electrical System projects (4001.07.03)

L-801, Upgrade SCADA performance measurement baseline (PMB) was changed via a Baseline Change Request (BCR) to reflect the proposed Firm-fixed Price milestone payment schedule of values as submitted in RPTO-007. The BCR required a point adjustment during the current period. (-\$476K)

Schedule Impacts to IRP – Facility System projects (4001.07.05)

L-934, Office Space Gap Reduction – CM unfavorable SV is due to the realization of BCWS in the current period for construction scope that was completed in a prior period ahead of schedule. (-\$191K)

Schedule Impacts to IRP – Network & Telecom System projects (4001.07.06)

L-937, Gabe East Footprint Reduction (Phase 1) Engineering Change Request (ECR) driving schedule impacts to RSC and Solar Array procurement and construction activities. ECR forecasted to complete in June. (-\$436K)

Impacts – N/A.

Corrective Action – N/A.

Cumulative To Date (CTD) Cost Variance (CV):

The unfavorable CTD CV of (-\$504K) or (-4.6%) is within reporting variance.

Impacts – N/A.

Corrective Action – N/A.

Cumulative To Date (CTD) Schedule Variance (SV):

The unfavorable CTD SV is (-\$5,241K) or (32.3%) primarily driven by:

Schedule impacts to IRP – Water System projects (4001.07.01)

L-897 Central Plateau Water Treatment Facility, delays in the awarding the membrane and processing equipment fabrication/procurement subcontract due to having to go through the full procurement process. (-\$652K) Project L-895 Fire Protection

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/05/23)
	c. Type CPAF,IDIQ	d. Share Ratio	
		c. EVMS Acceptance NO X YES	
Evaluation			

Infrastructure for PRW, delay in the awarding the A/E services subcontract due to having to go through the full procurement process. (-\$461K)

Schedule impacts to IRP – Electrical System projects (4001.07.03)

L-789, Priority T&D Sys Wood PP Test & Replace, having low likelihood planning and unplanned cutovers as well as Titan crews being dispatched to support power outages in Oregon. In addition, the subcontractor is performing outstanding change order scope that has delayed the existing planned schedule. (-\$1,477K) Project L-801, Upgrade SCADA was converted to a firm fixed price payment schedule in the current period via BCR. The project was unable to earn performance for Remote Terminal Unit (RTU) Install #1 and RTU CAT #3 milestones due to ongoing efforts to define completion criteria documentation prior to submitting to DOE. (-\$547K)

Schedule Impacts to IRP – Network & Telecom System (4001.07.06)

L-937 Gable East Footprint Reduction (Phase 1) continuing to recover from the pause at contract transition. The project team implemented the prior months' work scope and did not perform the baseline work scheduled. Authorization to perform work was received on February 8th, two weeks after the HMIS contract had begun. The project has also experienced delays with RSC design tasks, with the Engineering Change Request (ECR) development taking longer to complete, procurement receipts, and is holding up construction activities that were scheduled to start in March. (-\$1,482K)

Impacts – N/A.

Corrective Action – N/A.

Variance at Completion (VAC):

The unfavorable VAC is primarily driven by:

The unfavorable VAC of (\$4,890K) or (-1.3%) is primarily due to the following project drivers:

At Completion Impacts to IRP – Roads & Grounds projects (4001.07.04)

L-534, Overlay Interior 200 East Roads construction scope was removed from Performance Measurement Baseline via BCR, however spend forecast was still maintained in cost system. VAC will be corrected next fiscal month. (-\$2,086K)

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/05/23)
	c. Type CPAF,IDIQ	d. Share Ratio	
Evaluation		c. EVMS Acceptance NO X YES	

L-883, Chip Seal Rt 10, SR-240 to WYE Barricade construction scope was removed from Performance Measurement Baseline via BCR, however spend forecast was still maintained in cost system. VAC will be corrected next fiscal month. (-\$1,787K)

L-603, Chip Seal Route 3N (Route 11A to Route 3) construction scope was removed from Performance Measurement Baseline via BCR, however spend forecast was still maintained in cost system. VAC will be corrected next fiscal month. (-\$1,359K)

Impacts – N/A.

Corrective Action – The EACs will be reduced once the spend forecasts are removed from the system during the June accounting period. This will decrease the unfavorable VAC.

Negotiated Contract Changes:

The Negotiated Contract Cost for May 2021 is \$359.8M.

Changes in Estimated Cost of Authorized Unpriced Work:

The Authorized Unpriced Work (AUW) for May 2021 is \$24.9M based on CLIN 7 scope transferred to CLIN 4 base on customer direction.

Changes in Estimated Price:

The Estimated Price for May 2021 is \$414.8M. The Estimated Price includes the Most Likely Management Estimate at Completion (MEAC) of \$389.6M. The estimated fee includes assumed ~7% of Fee from CLIN 7 in the amount of \$25.2M. The fee is depended on Task Order (TO) negotiations and will be updated as necessary when TOs are definitized.

Changes in Undistributed Budget:

The UB for this reporting period is \$0M.

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Hanford Mission Integration Solutions, LLC	a. Name Hanford Mission Essential Services Contract(HMESC)	a. Name Hanford Mission Essential Services Contract(HMESC)	a. From (2021/04/26)
b. Location (Address and Zip Code) PO Box Richland, WA 99352	b. Number-89303320DEM00031	b. Phase - Operations	b. To (2021/05/23)
	c. Type CPAF,IDIQ	d. Share Ratio	
Evaluation		c. EVMS Acceptance NO X YES	

Changes in Management Reserve:

The Management Reserve (MR) for this reporting period is \$0M.

Differences in the Baseline:

This reporting period the Baseline began at \$387.6M and decreased to \$384.7M.

The following BCRs were implemented in May:

- BCR-HMS-21-026 – Align Reliability Projects to Proposal Submittals, Execution Strategy, and Construction Execution Change Orders.
- BCR-HMS-21-027– Implement Firm Fixed Price CLIN 7 Task Orders Invoicing Strategy.
- BCR-HMS-21-028 - Update Program Log for Contract Modification P00066 and Update RP Out Year Planning Package.

Best/Worst/Most Likely Management Estimate at Completion (MEAC):

The Best Case MEAC assumes the completion of the approved work scope at the current negotiated contract value consistent with the Contract Budget Base \$384.7M.

The Most Likely MEAC reflects the EAC including MR \$389.6M. The Worst Case Scenario assumes a 5 percent increase to the Most Likely MEAC case scenario \$409.0M.