

# MISSION SUPPORT ALLIANCE

"WE WILL MEASURE OUR SUCCESS BY OUR CUSTOMERS' SUCCESS"



# Monthly Performance Report October 2018

**R. E. Wilkinson**  
**President**

U.S. Department of Energy  
Contract DE-AC06-09RL14728



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This list of acronyms is intended as a reference for the reader to provide definitions that are not readily available away from the Hanford Site.

## TERMS

A&E	Architecture and Engineering
ALARA	As Low as Reasonably Achievable
AMB	Assistant Manager for Business and Financial Operations
AMMS	Assistant Manager for Mission Support
AMRP	Assistant Manager for River and Plateau
AMSE	Assistant Manager for Safety and Environment
ATP	Acceptable Test Procedures
BCR	Baseline Change Request
BPA	Bonneville Power Administration
BO	Business Operations
CAS	Contractor Assurance Systems
CHRP	Cultural and Historic Resource Program
CHPRC	CH2MHILL Plateau Remediation Company
CTD	Cost-to-Date
CV	Cost Variance
DART	Days Away Restricted Transferred
DLA	Direct Labor Adder
DOE	U.S. Department of Energy
ECOLOGY	State of Washington, Department of Ecology
EIS	Environmental Integration Services
EM	Office of Environmental Management
EMP	Enhanced Maintenance Program
EOC	Emergency Operations Center
ERDF	Environmental Restoration Disposal Facility
ES	Emergency Services
ES&H	Environment, Safety, and Health
EU	Electrical Utilities
FY	Fiscal Year
FYTD	Fiscal Year to Date
GIS	Geographic Information System
GFS/I	Government-Furnished Services and Information
HAMMER	Volpentest Hazardous Materials Management and Emergency Response Training and Education Center

# ACRONYMS LISTING



HCAB	Hanford Contract Alignment Board
HLAN	Hanford Local Area Network
HMAPS	Hanford Maps
HQ	Headquarters
HR	Human Resources
HRIP	Hanford Radiological Instrumentation Program
HSPD	Homeland Security Presidential Directive
ICWO	Inter-Contractor Work Order
IH	Industrial Hygiene
IM	Information Management
IIP	Integrated Investment Portfolio
IPT	Integrated Project Team
ISAP	Infrastructure and Services Alignment Plan
ISMS	Integrated Safety Management System
IT	Information Technology
LLTO	Lower Level Task Order
MOA	Memorandum of Agreement
MSA	Mission Support Alliance, LLC
MSC	Mission Support Contract
NEPA	National Environmental Policy Act
NOC	Network Operations Center
OCCB	Operational Change Control Board
OTP	Operational Test Procedures
ORP	Office of River Protection
OSHA	Occupational Safety and Health Administration
PFM	Portfolio Management
PFP	Plutonium Finishing Plant
PMB	Performance Measurement Baseline
PMTO	Portfolio Management Task Order
PNNL	Pacific Northwest National Laboratory
PO	Presidents Office
POSP	Parent Organization Support Plan
PPE	Personal Protection Equipment
PTA	Patrol Training Academy
PRC	Plateau Remediation Company
PW	Public Works
RES	Real Estate Services

# ACRONYMS LISTING



RFS	Request for Service
RMB	Risk Management Board
ROD	Record of Decision
RHP	Risk Handling Plan
RL	Richland Operations Office
RPIP	Reliability Project Investment Portfolio
SAS	Safeguards & Security
SNM	Spent Nuclear Material
SS&IM	Site Services and Interface Management
SV	Scheduled Variance
T&CO	Training and Conduct of Operations
TRC	Total Recordable Case
UBS	Usage-Based Services
VAC	Variance at Completion
VoIP	Voice over Internet Protocol
VPP	Voluntary Protection Program
WBS	Work Breakdown Structure
WRPS	Washington River Protection Solutions, LLC

## 1.0 INTRODUCTION

The Executive Overview section is intended to provide an executive-level performance overview. Included herein are descriptions of the Mission Support Alliance, LLC (MSA) significant accomplishments considered to have made the greatest contribution toward safe, environmentally sound, and cost-effective, mission-oriented services; progress against the contract with U.S. Department of Energy (DOE) Richland Operations Office (RL); project cost summary analysis; and overviews of safety. Unless otherwise noted, all data provided is through October 2018.

### 1.1 KEY ACCOMPLISHMENTS

**ISAP Receives Approval** – On September 28, 2018, RL formally notified MSA that the Infrastructure and Services Alignment Plan (ISAP) FY 2018 draft update was accepted. Submittal of the ISAP is the most significant annual milestone met by MSA SS&IM. The ISAP submittal underwent final reviews by RL and DOE ORP for concurrence on ISAP key messages, and MSA subject matter experts provided supporting reviews.

**PUREX Tunnel Response** – On October 26, 2018, MSA Emergency Services personnel provided quick and efficient action in response to a 911 call from the Plutonium Uranium Extraction Plant (PUREX) Building Emergency Director (BED) requesting a Precautionary Take Cover. Patrol Operations Center, Hanford Fire Department and Emergency Management Center personnel provided required site and offsite personnel notifications, command and control operations, as well as return to normal operating conditions during and after the event.

**Live Fire Shoot House** – Hanford Patrol took occupancy of the new Live Fire Shoot House and replacement of the new Gun Cleaning Facility at the Patrol Training Academy. The new facilities support patrol training program objectives and process improvements.



*Live Fire Shoot House Facility*

**Management Assessment Program (MAP)** – The MAP is an assurance program that integrates MSA's performance and business practices to present a clear and objective depiction of MSA's achievement toward key deliverables, facilitate risk informed decision making, and to drive continuous performance improvement. The purpose of the MAP is to allow MSA to monitor its overall business profile and transparently convey progress to DOE and other oversight entities. In October, the MAP became viewable for all of RL and MSA, and the MAP icon was pushed to all of MSA and RL desktops enabling ready access.

**Connect Tri-Cities** – On October 3 2018, MSA partnered with several local vendors to host the second annual *Connect Tri-Cities* networking event. This successful event allowed multiple entities to connect, share ideas, and exchange information that will serve local employers, as well as the community. It also provided a platform for employers, educational institutions and other entities to work together while addressing future workforce needs.

**Successful Negotiations – Calibration Technicians** - In April 2017, the Calibration Technicians voted to organize and designated the Hanford Atomic Metal Trades Council (HAMTC), AFL-CIO as their collective bargaining representative. MSA entered into Appendix “A” negotiations with the International Brotherhood of Electrical Workers (IBEW), Local 77, in late July 2017, with the purpose of negotiating a wage schedule for this employee classification. After approximately fifteen months of negotiation, MSA and the Calibration Technicians successfully reached an agreement, which the Calibration Technicians ratified on October 24, 2018. The Calibration Technicians will be transitioned from non-exempt, non-bargaining unit employees to bargaining unit employees, effective Monday, November 5, 2018.

**Transport of Scrap Steel and Copper** – On October 23 - 24, 2018, MSA Teamsters supported MSA Electrical Utilities workers with cleanup of the A9 Substation in the 100K Area. Crews safely loaded and hauled four semi-trailer loads of scrap steel and copper to a local recycling center. Although the job was scheduled to take four days, the work was completed within two days as the result of collaborative and efficient teamwork.



*Scrap steel and copper being readied for transport to recycling center*

**Cleanup of Laydown Yards** – MSA Environmental Integration Services assisted with the cleanup of laydown yards by removing miscellaneous debris from around several water and sewer utilities buildings. Waste was taken to the 6608 facility, where radiological surveys were performed before items were placed into disposal boxes.



*Laydown yard debris ready for disposal.*

**Solar Light Towers for Fleet Facilities** – MSA Fleet

Services procured four solar/battery powered light towers to improve pedestrian and vehicle safety around Fleet Maintenance facilities. The solar light towers require significantly less maintenance than engine powered units, do not generate any air emissions due to the lack of engine exhaust, and also reduce the risk of hazardous fluids spills or releases to the ground. The masts of the units can be extended up to 30 feet in the air to project illumination over a large area. Additionally, the units can operate on a light sensing photocell or a built-in 24/7 programmable timer.



*New solar light towers improve pedestrian and vehicle safety*

**Revegetation Efforts** – A number of sites were selected for revegetation and/or corrective action in FY 2019. Forb plugs and additional shrubs and grasses are being used that meet the seed/variety mix requirements for the Hanford Site. Corrective actions started October 1, 2018, and field activities will continue through the late fall and winter months.

**Vegetation Removal on Rail Line** – Last year, eight miles of rail were utilized by Burlington Northern trains to transport oversized equipment to Energy Northwest facilities. Prior to each use, the MSA lines must be cleared of vegetation. MSA Biological Controls has started the process of weed eating the eight miles of rail line, applying herbicides and removing tumbleweeds encroaching on the berms. Initially, this task will be time consuming, but with consistent application of herbicides within season, the rails should remain clear and no longer require hand vegetation removal.



*Crews clearing rail line of vegetation*

**Record Transfer Complete** – MSA Content and Records Management (C&RM) staff transferred 115 cubic feet of project construction records dating from 1943 through 1971 from the Hanford Records Holding Area to the National Archives in Seattle. The transfer was made to ensure the records will be preserved and made available in perpetuity. This shipment, coupled with a shipment of 500 cubic feet of records to the Seattle Federal Records Center, achieved C&RM’s goal of transferring 1,500 cubic feet of records in fiscal year (FY) 2018.

**Annual Pump Testing** – On October 10, 2018, HFD personnel conducted Annual Apparatus Pump Testing. The testing allows the HFD to meet the recommendations of the National Fire Protection Association (NFPA) 1911 Standard for the inspection, maintenance, testing and retirement of in-service automotive fire equipment.

**Annual Fire Extinguisher Inspection and Maintenance** – The Hanford Fire Department (HFD) conducted its Annual Fire Extinguisher Inspection and Maintenance on October 25, 2018. Seventy-eight vehicle fire extinguishers were inspected.

**10 CFR 851 Revision Submitted** – On October 17, 2018, MSA Integrated & Site Wide Safety Standards (ISWSS) submitted the revised 10 CFR 851, *Worker Safety and Health Program (WSHP)*, to DOE for approval. The revisions incorporate the 10 CFR 851 Technical Amendment, published on December 18, 2017, and incorporates updates to several consensus standards. In response to DOE Richland Operations Office (DOE-RL) direction, ISWSS also provided a written hazard abatement plan that meets the requirements specified in Section 851.22. The plan provided justification and documentation for risk, interim worker protective measures, and estimated cost and an implementation schedule for short-term and long-term abatement of the identified hazards.

**Radiological Control Technician (RCT) Cycle One Training Pilot** – Volpentest HAMMER Federal Training Center (HAMMER) staff piloted the first RCT Cycle One class October 3-4, 2018. Course content consisted of knowledge-based, hands-on, and live exercises, and included radiological work practices, decontamination, activity decay, fire fighter bunker gear removal, pre-job briefing, and a Plutonium Finishing Plant case study. Twenty-four RCTs, First Line Managers, and Health Physicists attended the pilot class.



*RCT Cycle One training in progress*

**Support to PNNL Nuclear Smuggling Detection and Deterrence (NSDD) All-Hands Training** – HAMMER Operations staff supported the Pacific Northwest National Laboratory as it conducted a Nuclear Smuggling Detection and Deterrence (NSDD) All-Hands training session at HAMMER October 8-12, 2018. Training activities, held in HAMMER’s Field Exercise Building, State Department Building, and Port of Entry, provided NSDD instructors with updates and formal policies.

**Strategic Sourcing** – The MSA procurement organization was presented the EM Strategic Sourcing Commodity Agreement Achievement award from the Supply Chain Management Center (SCMC) on October 23, 2018. The award recognized MSA’s outstanding utilization of strategic agreements and FY 2018 year over year savings growth of 14.5%.



**NEPA Coordination and Integration** – During October, MSA Environmental Integration Services (EIS) staff worked with the DOE National Environmental Protection Act (NEPA) Compliance Officer (DOE-NCO) on several strategic initiatives, including projects qualifying for NEPA Annual Categorical Exclusions or NEPA Activity-Specific Categorical Exclusions. Additionally, guidance is being developed to integrate NEPA considerations early in project planning to inform the NEPA process by identifying the need for action, a proposed action, and a range of reasonable alternatives based on evaluation of NEPA values, environmental consequences, and mitigation measures.

**Science and Technology Career Fair** – On October 18, 2018, MSA Human Resources participated in the Eastern Washington University (EWU) 2018 Science and Technology



Career Fair in Cheney, WA. Representatives met with many Computer Science and Engineering students seeking internships and future full-time employment. The students were provided with information about the Hanford Site as well as MSA's role in the overall mission, and encouraged to apply for positions through MSA's online portal.

**Hanford Site Tours** – MSA staff coordinated a number of Hanford Site tours in October. Tours were provided to groups including:

- Hanford Advisory Committee members
- DOE-HQ visitors, including Anne White and Representatives Dan Newhouse and Derek Kilmer and staffers
- DOE-HQ Procurement personnel
- North Americas Building Trades Union representatives

**Fall Edition of the Hanford Forward Newsletter** – MSA distributed edition 16 of the Hanford Forward electronic newsletter to a subscription list of approximately 10,000. The list includes elected officials, Hanford workers, stakeholders and members of the public. MSA has redesigned the newsletter to be a monthly electronic piece, which will be shorter and catchier with one- to two-sentence intros, photos and links to the complete article.

**Lifecycle Report** – MSA worked collaboratively with RL and the DOE Office of River Protection (ORP) to plan the schedule for completion of the final 2019 Lifecycle Report. Although RL and ORP have completed reviews of the draft report, a team from DOE-Headquarters (HQ) will be submitting review comments in December 2018. These late comments could potentially affect MSA meeting the final report submittal due date of December 31, 2018.



## 1.2 LOOK AHEAD

**Surge in Site Electrical Training Demand Expected** – HAMMER is preparing for a significant increase in electrical training demand this fall and winter. The demand is driven by Hanford’s urgent need to train workers according to the recent changes in the updated national electric code in which all electrical practitioners are required to take either the National Fire Protection Association (NFPA) 2018 or DOE-0359 course to maintain compliance with the program.

2.0 ANALYSIS OF FUNDS

Table 2-1. Mission Support Alliance, LLC Funds Management (dollars in thousands).

Funds Source PBS	Title	MSA Expected Funding*	Funds Received**	FYTD Actuals	Remaining Available Funds from Funds Received
ORP-0014	Radiological Liquid Tank Waste Stabilization and Disposition Operations	\$201.2	\$201.2	\$-	\$201.2
RL-0020	Safeguards & Security	\$85,567.7	\$17,818.2	\$4,775.3	\$13,042.9
RL-0040	Reliability Projects/HAMMER/ Inventory	\$3,648.0	\$3,672.0	\$602.9	\$3,069.1
RL-0201	Hanford Site-Wide Services	\$38,766.9	\$12,108.1	\$1,660.7	\$10,447.4
RL-0041	B Reactor	\$3,298.5	\$3,298.5	\$-	\$3,298.5
SWS	Site-Wide Services	\$227,503.6	\$50,060.2	\$12,765.6	\$37,294.6
<b>Total</b>		<b>\$358,985.9</b>	<b>\$87,158.2</b>	<b>\$19,804.5</b>	<b>\$67,353.7</b>

EAC = Estimate at Completion  
 HSPD = Homeland Security  
 Presidential Directive 12

FYTD = Fiscal Year to Date.  
 HAMMER = Volpentest HAMMER Federal Training Center  
 PBS = Project Baseline Summary.

SWS = Site-Wide Services.

\* Assumes funding through CBAG Rev 1

\*\* Funds received through Contract Modification 750, dated November 15, 2018

Based upon FY18 actuals the remaining uncosted carryover balance will fund SWS through December 3, 2018, and RL-0020 through November 27, 2018.



## 3.0 SAFETY PERFORMANCE

During the month of October, MSA experienced one injury that was classified as “Recordable.” This case also met the criteria for, and was classified as, Days Away, Restricted or Transferred (DART). As a result, both the fiscal year 2019 Total Recordable Case (TRC) and DART rates are 0.65. The TRC rate is well below the DOE performance measurement baseline of 1.1; however, the DART rate is slightly higher than the DOE goal of 0.60. There were nine First Aid cases reported, slightly higher than the monthly average of seven cases.

Seasonal changes are being observed, and additional tools and communications have been provided to employees to help prepare for the upcoming winter months. MSA will continue to engage employees and focus on safety awareness and injury reduction activities by issuing safety bulletins for emergent hazardous conditions that require immediate attention and ensuring all employees have appropriate personal protection equipment (PPE) prior to performing work.



Table 3-1. Total Recordable Case Rate, (TRC)

**Objective**

Monitor the Total Recordable Case (TRC) rate for MSA employees and subcontractors (Note: does not include independent subcontractors)

**Measure**

The TRC is measured in accordance with OSHA guidelines for reporting and calculating. The rate is calculated by multiplying the number of Recordable cases by 200,000 and dividing by the total number of work hours.

**Performance Thresholds**

Adverse	> 1.3
Cautionary	1.1 - 1.3
Meets	< 1.1

**Performance Data**

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Monthly Recordable Cases	1	1	0	0	1	2	1	1	1	0	1	1
Monthly TRC Rate	0.52	0.60	0.00	0.00	0.43	1.17	0.53	0.61	0.62	0.00	0.49	0.65
Performance (3-m Average)	0.86	0.60	0.40	0.20	0.18	0.52	0.68	0.76	0.58	0.36	0.33	0.34
Performance (12-m Average)	0.76	0.66	0.66	0.60	0.60	0.65	0.64	0.65	0.65	0.54	0.46	0.46

**Specific Goal to Achieve**

The MSA goal is to "do work safely" and achieve target zero by reducing injuries, accidents and incidents. The DOE-EM goal is to maintain a TRC rate below 1.1.

**Leading Indicator Description**

TRC is a lagging indicator.

**Performance Indicator Information**

PI Owner:	Lanette Adams
Data Analyst:	Ron Wight
Data Source:	MSMET
PI Basis:	MSC-PLN-WP-003, Sect. 4.0
Date:	10/8/2018

**FY19 = 0.65** **CY18 = 0.44**

**Total Recordable Case (TRC) Rate**

**Analysis**

During the month of October one injury was classified as 'Recordable'. The overexertion case occurred when an employee injured their arm while lifting and placing an item into a truck. This incident was also classified as DART due to the extent of the injury.

2018 FY Recordable Cases: 10 (TRC = 0.46)  
 2017 FY Recordable Cases: 14 (TRC = 0.67)

- Types of injuries MSA has experienced during FY 2019 that were classified as Recordable:
  - overexertion (1)
- Body parts that have been affected FY2019:
  - arm (1)

**Action**

Injury Prevention Actions:

- All First Aid cases are closely monitored to determine emerging trends and implement awareness activities, as warranted
- MSA continues to emphasize the importance of timely reporting for all injuries
- Initiated activities, such as procurements for PPE, and awareness communications in preparation for cold weather and other seasonal changes
- Issued Weekly Safety Starts which focused on fire prevention, cold and flu season, situational awareness, and Halloween/daylight savings' time injury statistics
- Continued to provide inspection modules in support of the safety inspection campaign that meets an MSA 2018 Safety Improvement Plan (SIP) goal of improving work area conditions and increasing employee participation in safety & health inspections. The inspection modules are discussed at Employee Zero Accident Council (EZAC) and Presidents' Zero Accident Council (PZAC) meetings.

**Additional Info**

None



Table 3-2. Days Away, Restricted, Transferred, (DART)

**Objective**

Monitor the days away, restricted or transferred (DART) case rate for MSA employees and subcontractors

**Measure**

The DART rate is measured in accordance with OSHA guidelines for reporting and calculating. The rate is calculated by multiplying the number of Recordable cases by 200,000 and dividing by the total number of work hours.

**Performance Thresholds**

Adverse	> 0.75
Cautionary	0.6 - 0.75
Meets EM goal	< 0.6

**Performance Data**

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
Monthly DART Cases	0	0	0	0	1	0	0	0	1	0	1	1
Monthly DART rate	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.62	0.00	0.49	0.65
Performance (3-m Average)	0.35	0.00	0.00	0.00	0.18	0.17	0.17	0.00	0.19	0.18	0.33	0.34
Performance (12-m Average)	0.47	0.33	0.33	0.28	0.32	0.28	0.23	0.23	0.23	0.18	0.14	0.18

**Specific Goal to Achieve**

The MSA goal is to "do work safely" and achieve target zero by reducing injuries, accidents and incidents. The DOE-EM goal is to maintain a DART rate below 0.6.

**Lagging Indicator Description**

A lagging indicator is a record of past events. DART rate is a lagging indicator that may show a trend in serious injuries.

**Performance Indicator Information**

PI Owner:	Lanette Adams
Data Analyst:	Ron Wight
Data Source:	MSMET
PI Basis:	MSC-PLN-WP-003, Section 4.0
Date	11/8/2018

**Analysis**

During the month of October, there was one injury classified as DART. The overexertion case occurred when an employee injured their arm while lifting and placing an item into a truck.

2018 FY DART Cases: 3  
2017 FY DART Cases: 10

- Types of injuries MSA has experienced during FY 2019 that were classified as DART:
  - overexertion (1)
- Body parts that have been affected FY2019:
  - Arm (1)

**Action**

Injury Prevention Actions:

- All First Aid cases are closely monitored to determine emerging trends and implement awareness activities, as warranted
- MSA continues to emphasize the importance of timely reporting for all injuries
- Initiated activities, such as procurements for PPE, and awareness communications in preparation for cold weather and other seasonal changes
- Issued Weekly Safety Starts which focused on fire prevention, cold and flu season, situational awareness, and Halloween/daylight savings' time injury statistics
- Continued to provide inspection modules in support of the safety inspection campaign that meets an MSA 2018 SIP goal of improving work area conditions and increasing employee participation in safety & health inspections. The inspection modules are discussed at EZAC and PZAC meetings.

**Additional Info**

None

**Days Away, Restricted or Transferred (DART) Case Rate**

FY19 = 0.65      CY18 = 0.22



Table 3-3. First-Aid Case Rate

**Objective**  
Monitor the number of First Aid cases and rate as a leading indicator to days away, restricted, or transferred (DART) and Total Recordable Case (TRC) rates for MSA and subcontractor employees.

**Measure**  
The metric is a count of the number of First Aid cases per month, and the rate of cases. The rate is calculated by multiplying the number of First Aid cases by 200,000 and dividing by the total number of work hours for a given period.

**Performance Thresholds**

Adverse	n/a
Declining	n/a
Meets	n/a

**Performance Data**

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18
First Aid Cases	10	8	9	9	7	6	9	4	11	6	6	9
Monthly First Aid Rate	5.23	4.78	6.19	5.12	3.03	3.50	4.74	2.44	6.79	2.56	2.92	5.82
Performance (3 month Average)	6.56	6.95	5.36	5.32	4.53	3.80	3.71	3.62	4.65	3.75	3.82	3.53
Performance (12 month Average)	5.72	5.68	5.77	5.62	5.57	5.49	5.44	5.04	5.18	4.82	4.67	4.29

**Specific Goal to Achieve**  
The goal is to "do work safely" and achieve target zero by reducing injuries, accidents and incidents while encouraging reporting of all minor injuries.

**Leading Indicator Description**  
Non-reportable precursors are a leading indicator to reportable events. An increase in the number of First Aid cases could indicate a potential increase of more significant events.

**Performance Indicator Information**

PI Owner:	Lanette Adams
Data Analyst:	Ron Wight
Data Source:	MSMET
PI Basis:	MSC-PLN-WP-003 Sect. 4.0
Date	11/8/2018

FY19 = 5.82      CY18 = 4.15

**First Aid**

**Analysis**  
MSA experienced 9 First Aid cases in October. The injuries were caused by the following incidents: three body motion; two struck against; one struck by; one slip/trip/fall; one overexertion; and, one contact with.  
Year to date, there is no single cause that has contributed to a majority of the injuries.

- 33% by body motion, 22% from being struck against, 11% by overexertion, 11% from being struck by, 11% by a slip/trip/fall, 11% contact with (rub, abrade).
- 44% arm/hand, 44% leg/foot, 11% chest.

FY 2018 First Aid Cases: 102 (Rate = 4.67)  
FY 2017 First Aid Cases: 110, (Rate = 5.23)

**Actions**  
Injury Prevention Actions:  
• All First Aid cases are closely monitored to determine emerging trends and implement awareness activities, as warranted  
• MSA continues to emphasize the importance of timely reporting for all injuries  
• Initiated activities, such as procurements for PPE, and awareness communications in preparation for cold weather and other seasonal changes  
• Issued Weekly Safety Starts which focused on fire prevention, cold and flu season. situational awareness, and Halloween/daylight savings' time injury statistics  
• Continued to provide inspection modules in support of the safety inspection campaign that meets an MSA 2018 SIP goal of improving work area conditions and increasing employee participation in safety & health inspections. The inspection modules are discussed at EZAC and PZAC meetings.



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

Table 4-1. 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	
<b>1. Contractor</b>		<b>2. Contract</b>			<b>3. Program</b>			<b>4. Report Period</b>					
a. Name Mission Support Alliance		a. Name Mission Support Contract			a. Name Mission Support Contract			a. From (2018/10/01)					
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728		b. Phase Operations		b. To (2018/10/21)							
c. TYPE CPAF		d. Share Ratio		c. EVMS ACCEPTANCE No X Yes									
<b>5. CONTRACT DATA</b>													
a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK		d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING		i. DATE OF OTB/OTS			
N/A	\$3,564,085	\$0		\$210,609	\$3,774,694	\$4,005,881	N/A	N/A		N/A			
<b>6. ESTIMATED COST AT COMPLETION</b>						<b>7. AUTHORIZED CONTRACTOR REPRESENTATIVE</b>							
			CONTRACT BUDGET BASE (2)		VARIANCE (3)		a. NAME (Last, First, Middle Initial) Wilkinson, Robert E			b. TITLE MSC Project Manager			
a. BEST CASE			\$3,564,085				c. SIGNATURE <i>[Signature]</i>			d. DATE SIGNED 11/20/18			
b. WORST CASE			\$3,985,035										
c. MOST LIKELY			\$3,795,272		3,564,085		(231,187)						
<b>8. PERFORMANCE DATA</b>													
Item (1)	Current Period					Cumulative to Date					At Completion		
	Budgeted Cost		Actual Cost Work Performed (4)	Variance		Budgeted Cost		Variance			Budgeted (12)	Estimated (13)	Variance (14)
	Work Scheduled (2)	Work Performed (3)		Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)	Actual Cost Work Performed (9)	Schedule (10)	Cost (11)			
<b>a. WORK BREAKDOWN STRUCTURE ELEMENT</b>													
3001.01.01 - Safeguards and Security	3,336	3,336	3,758	0	(423)	532,984	532,984	546,859	0	(13,875)	566,449	590,104	(23,655)
3001.01.02 - Fire and Emergency Response	1,161	1,161	2,206	0	(1,045)	198,034	198,034	232,016	0	(33,982)	209,927	255,004	(45,076)
3001.01.03 - Emergency Management	359	359	259	0	99	44,172	44,172	41,235	0	2,937	47,781	43,878	3,903
3001.01.04 - HAMMER	177	177	530	0	(353)	58,024	58,024	66,769	0	(8,745)	59,834	72,352	(12,518)
3001.01.05 - Emergency Services Management	71	71	102	0	(31)	13,646	13,646	14,063	0	(417)	14,361	15,626	(1,265)
3001.02.01 - Site-Wide Safety Standards	22	22	82	0	(60)	6,555	6,555	8,277	0	(1,722)	6,780	9,029	(2,249)
3001.02.02 - Environmental Integration	282	282	252	0	30	52,040	52,040	52,128	0	(89)	54,894	54,987	(93)
3001.02.03 - Public Safety & Resource Protection	619	619	955	0	(337)	65,507	65,507	64,979	0	527	71,695	71,657	38
3001.02.04 - Radiological Site Services	0	0	0	0	(0)	4,774	4,774	5,129	0	(354)	4,774	5,253	(479)
3001.02.05 - WSCF Analytical Services	56	56	0	0	56	52,313	52,313	50,457	0	1,856	52,864	50,457	2,407
3001.03.01 - IM Project Planning & Controls	151	151	90	0	61	34,070	34,070	31,473	0	2,596	35,600	32,172	3,428
3001.03.02 - Information Systems	901	901	629	0	271	120,616	120,616	111,367	0	9,249	129,619	118,158	11,462
3001.03.03 - Infrastructure / Cyber Security	170	170	602	0	(432)	35,438	35,438	38,624	0	(3,187)	37,156	42,759	(5,602)
3001.03.04 - Content & Records Management	455	455	411	0	44	66,090	66,090	63,503	0	2,587	70,622	66,855	3,766
3001.03.05 - IR/CM Management	71	71	104	0	(33)	12,040	12,040	12,225	0	(186)	12,754	13,195	(441)
3001.03.06 - Information Support Services	126	126	81	0	45	14,180	14,180	13,065	0	1,115	15,446	14,104	1,342
3001.04.01 - Roads and Grounds Services	191	191	136	0	55	25,558	25,558	27,737	0	(2,179)	27,486	30,532	(3,047)
3001.04.02 - Biological Services	218	218	369	0	(150)	33,404	33,404	34,600	0	(1,196)	35,595	37,111	(1,516)
3001.04.03 - Electrical Services	390	390	992	0	(602)	86,779	86,779	108,064	0	(21,285)	90,804	118,696	(27,892)
3001.04.04 - Water/Sewer Services	334	334	1,024	0	(690)	90,768	90,768	116,033	0	(25,265)	94,227	127,404	(33,177)
3001.04.05 - Facility Services	0	0	0	0	0	7,900	7,900	7,900	0	(0)	7,900	7,900	(0)
3001.04.06 - Transportation	0	0	20	0	(20)	9,721	9,721	10,447	0	(726)	9,721	10,676	(955)



Table 4-1, cont. 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 Mission Support Alliance		a. Name Mission Support Contract			a. Name Mission Support Contract				a. From (2018/10/01)				
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728			b. Phase Operations				b. To (2018/10/21)				
c. TYPE CPAF		d. Share Ratio			c. EVMS ACCEPTANCE No X Yes								
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 (Cont'd)													
3001.04.07 - Fleet Services	39	39	0	0	39	8,691	8,691	7,322	0	1,369	9,090	7,322	1,768
3001.04.08 - Crane and Rigging	0	0	0	0	0	2,187	2,187	2,187	0	(0)	2,187	2,187	(0)
3001.04.09 - Railroad Services	0	0	0	0	(0)	370	370	580	0	(210)	370	666	(296)
3001.04.10 - Technical Services	202	202	405	0	(203)	40,906	40,906	46,586	0	(5,680)	42,951	50,880	(7,929)
3001.04.11 - Energy Management	229	229	98	0	131	14,172	14,172	10,666	0	3,506	16,479	11,649	4,830
3001.04.12 - Hanford Historic Buildings Preservation	43	43	205	0	(162)	20,908	20,908	22,913	0	(2,005)	21,643	24,520	(2,877)
3001.04.13 - Work Management	67	67	308	0	(241)	14,323	14,323	18,414	0	(4,091)	15,004	20,251	(5,247)
3001.04.14 - Land and Facilities Management	466	466	308	0	158	45,099	45,099	41,735	0	3,364	49,790	48,147	1,643
3001.04.15 - Mail & Courier	79	79	63	0	16	7,829	7,829	6,618	0	1,211	8,611	7,006	1,605
3001.04.16 - Property Systems/Acquisitions	370	370	442	0	(72)	52,929	52,929	54,705	0	(1,776)	56,637	59,456	(2,819)
3001.04.17 - General Supplies Inventory	9	9	(107)	0	115	1,503	1,503	1,396	0	107	1,587	1,449	138
3001.04.18 - Maintenance Management Program Implementation	131	131	57	0	74	11,790	11,790	9,843	0	1,947	13,114	10,362	2,752
3001.06.01 - Business Operations	236	236	312	0	(76)	48,036	48,036	12,860	0	35,176	50,418	16,806	33,612
3001.06.02 - Human Resources	214	214	187	0	26	24,388	24,388	22,303	0	2,085	26,544	24,490	2,054
3001.06.03 - Safety, Health & Quality	798	798	1,036	0	(238)	155,234	155,234	164,434	0	(9,200)	163,274	175,937	(12,664)
3001.06.04 - Miscellaneous Support	487	487	390	0	97	53,295	53,295	50,730	0	2,565	58,207	55,346	2,861
3001.06.05 - Presidents Office (G&A nonPMB)	0	0	0	0	0	16	16	16	0	0	16	16	0
3001.06.06 - Strategy	0	0	0	0	0	2,529	2,529	2,529	0	0	2,529	2,529	0
3001.07.01 - Portfolio Management	393	393	241	0	152	61,261	61,261	57,251	0	4,011	65,233	60,734	4,499
3001.08.01 - Water System	706	1,062	613	357	449	34,548	34,929	20,866	381	14,063	43,538	28,618	14,920
3001.08.02 - Sewer System	166	163	255	(3)	(92)	15,711	15,327	17,576	(384)	(2,249)	16,661	18,815	(2,154)
3001.08.03 - Electrical System	311	75	65	(235)	10	19,354	19,029	19,309	(325)	(280)	20,623	20,849	(226)
3001.08.04 - Roads and Grounds	0	0	0	0	0	9,137	9,137	8,533	0	604	9,137	8,533	604
3001.08.05 - Facility System	328	144	126	(184)	18	10,065	9,631	9,693	(434)	(62)	10,707	10,829	(122)
3001.08.06 - Reliability Projects Studies & Estimates	296	296	304	0	(8)	14,791	14,791	16,718	0	(1,927)	17,759	19,674	(1,915)
3001.08.07 - Reliability Project Spare Parts Inventory	118	118	163	0	(45)	3,354	3,354	3,195	0	159	4,179	3,923	256
3001.08.08 - Network & Telecommunications System	131	152	167	21	(14)	17,819	17,860	20,130	41	(2,270)	18,205	20,454	(2,249)
3001.08.09 - Capital Equipment Not Related to Construction	0	0	0	0	0	12,002	12,002	10,835	0	1,167	12,002	10,835	1,167
3001.08.10 - WSCF - Projects	0	0	0	0	0	979	979	810	0	169	979	810	169
3001.08.11 - Support of Infrastructure Interface to ORP	0	0	0	0	0	994	994	775	0	219	994	775	219
3001.08.12 - Reliability Projects Out Year Planning	0	0	0	0	0	0	0	0	0	0	14,320	14,320	0
3001.90.04 - MSA Transition	0	0	0	0	0	5,868	5,868	5,868	0	0	5,868	5,868	0
3001.B1.06 - Projects	0	0	0	0	0	(0)	(0)	0	0	(0)	(0)	0	(0)
b. COST OF MONEY													
c. GENERAL AND ADMINISTRATIVE													
d. UNDISTRIBUTED BUDGET													
e. SUBTOTAL (Performance Measurement Baseline)	14,906	14,860	18,239	(44)	(3,379)	2,274,701	2,273,979	2,324,344	(721)	(50,365)	2,434,946	2,531,964	(97,018)



Table 4-1, cont. Format 1, DD Form 2734/1, Work Breakdown Structure

CONTRACT PERFORMANCE REPORT														DOLLARS IN Thousands			FORM APPROVED OMB No. 0704-0188	
FORMAT 1 - WORK BREAKDOWN STRUCTURE																		
1. Contractor		2. Contract				3. Program				4. Report Period								
a. Name Mission Support Alliance		a. Name Mission Support Contract				a. Name Mission Support Contract				a. From (2018/10/01)								
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728		b. Phase Operations				b. To (2018/10/21)										
c. TYPE CPAF		d. Share Ratio		c. EVMS ACCEPTANCE No X Yes														
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)								
a2. WORK BREAKDOWN STRUCTURE ELEMENT																		
3001.01.04 - HAMMER	520	520	906	0	(387)	118,036	118,036	132,517	0	(14,481)	123,267	142,504	(19,237)					
3001.02.04 - Radiological Site Services	769	769	649	0	120	64,735	64,735	57,721	0	7,014	72,360	63,953	8,407					
3001.02.05 - WSCF Analytical Services	757	757	0	0	757	77,981	77,981	53,176	0	24,804	85,486	53,176	32,310					
3001.03.02 - Information Systems	145	145	217	0	(72)	6,686	6,686	6,897	0	(211)	8,144	8,520	(376)					
3001.03.04 - Content & Records Management	49	49	51	0	(2)	2,277	2,277	2,124	0	153	2,776	2,611	165					
3001.03.06 - Information Support Services	0	0	0	0	0	4,043	4,043	4,043	0	(0)	4,043	4,043	(0)					
3001.03.07 - Information Technology Services	1,771	1,771	2,675	0	(904)	73,274	73,274	75,748	0	(2,475)	91,038	96,097	(5,058)					
3001.04.05 - Facility Services	421	421	715	0	(294)	65,970	65,970	74,524	0	(8,554)	70,209	81,705	(11,496)					
3001.04.06 - Transportation	115	115	368	0	(253)	37,234	37,234	47,066	0	(9,832)	38,389	52,184	(13,795)					
3001.04.07 - Fleet Services	488	488	1,192	0	(704)	114,370	114,370	133,368	0	(18,998)	119,258	143,942	(24,684)					
3001.04.08 - Crane and Rigging	613	613	777	0	(164)	106,732	106,732	112,384	0	(5,652)	112,909	120,160	(7,250)					
3001.04.10 - Technical Services	3	3	176	0	(172)	1,143	1,143	6,609	0	(5,466)	1,177	8,443	(7,266)					
3001.04.13 - Work Management	0	0	23	0	(23)	2,676	2,676	3,790	0	(1,114)	2,676	4,155	(1,479)					
3001.04.14 - Land and Facilities Management	446	446	696	0	(250)	59,987	59,987	64,429	0	(4,442)	64,449	70,409	(5,960)					
3001.04.15 - Mail & Courier	13	13	14	0	(0)	1,532	1,532	1,517	0	15	1,667	1,656	11					
3001.06.01 - Business Operations	478	478	591	0	(112)	101,038	101,038	103,160	0	(2,122)	106,813	109,462	(2,649)					
3001.06.02 - Human Resources	107	107	247	0	(140)	24,193	24,193	28,197	0	(4,004)	25,274	30,633	(5,359)					
3001.06.03 - Safety, Health & Quality	122	122	10	0	111	13,795	13,795	13,782	0	13	15,025	15,183	(158)					
3001.06.04 - Miscellaneous Support	55	55	240	0	(185)	12,855	12,855	16,009	0	(3,154)	13,406	17,512	(4,106)					
3001.06.05 - Presidents Office (G&A nonPMB)	223	223	163	0	59	25,785	25,785	24,987	0	798	28,005	27,014	992					
3001.06.06 - Strategy	17	17	10	0	7	2,961	2,961	2,844	0	117	3,132	3,007	125					
3001.A1.01 - Transfer - CHPRC	4,206	4,206	4,683	0	(477)	643,872	643,872	646,124	0	(2,252)	685,906	689,193	(3,287)					
3001.A1.02 - Transfer - WRPS	844	844	3,456	0	(2,612)	203,064	203,064	285,271	0	(82,206)	211,493	319,271	(107,778)					
3001.A1.03 - Transfers - FH Closeout	0	0	0	0	0	207	207	228	0	(21)	209	228	(19)					
3001.A1.04 - Transfers - CHG Closeout	0	0	0	0	0	13	13	13	0	0	13	13	0					
3001.A2.01 - Non Transfer - BNI	0	0	31	0	(31)	2,800	2,800	3,215	0	(415)	2,800	3,394	(594)					
3001.A2.02 - Non Transfer - AMH	9	9	0	0	9	1,252	1,252	954	0	297	1,340	954	385					
3001.A2.03 - Non Transfer - ATL	11	11	0	0	11	1,091	1,091	702	0	389	1,204	702	502					
3001.A2.04 - Non-Transfer - WCH	216	216	0	0	216	48,445	48,445	41,726	0	6,720	50,589	41,726	8,863					
3001.A2.05 - Non-Transfers - HPM	0	0	50	0	(50)	1,549	1,549	2,806	0	(1,257)	1,549	3,097	(1,548)					
3001.A2.06 - Non-Transfers - BNI Corp	0	0	0	0	0	1	1	1	0	0	1	1	0					
3001.A2.07 - Non-Transfers-WAI	0	0	46	0	(46)	273	273	937	0	(664)	273	975	(703)					
3001.A4.01 - Request for Services	253	253	333	0	(80)	101,950	101,950	109,896	0	(7,946)	104,476	113,768	(9,292)					
3001.A4.02 - HAMMER RFSs	2	2	137	0	(135)	26,276	26,276	32,959	0	(6,683)	26,297	34,555	(8,258)					
3001.A4.03 - National Guard RFSs	0	0	0	0	0	1,553	1,553	1,550	0	3	1,554	1,550	4					
3001.A4.04 - PNNL RFSs	1,186	1,186	22	0	1,164	11,305	11,305	12,129	0	(824)	11,420	12,388	(968)					
3001.A5.01 - RL PD	42	42	32	0	10	6,344	6,344	6,281	0	63	6,773	6,512	261					
3001.A5.02 - ORP PD	0	0	29	0	(29)	6,463	6,463	7,904	0	(1,440)	6,463	8,111	(1,647)					



Table 4-1, cont. Format 1, DD Form 2734/1, Work Breakdown Structure

CONTRACT PERFORMANCE REPORT														FORM APPROVED		
FORMAT 1 - WORK BREAKDOWN STRUCTURE														OMB No. 0704-0188		
DOLLARS IN Thousands																
1. Contractor		2. Contract			3. Program				4. Report Period							
a. Name Mission Support Alliance		a. Name Mission Support Contract			a. Name Mission Support Contract				a. From (2018/10/01)							
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728			b. Phase Operations				b. To (2018/10/21)							
c. TYPE		d. Share Ratio			c. EVMS ACCEPTANCE											
Item (1)	Current Period				Cumulative to Date						At Completion					
	Budgeted Cost		Actual Cost Work (4)	Variance		Budgeted Cost		Variance		Budgeted (12)	Estimated (13)	Variance (14)				
	Work Scheduled (2)	Work Performed (3)		Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)	Actual Cost Work Performed (9)	Schedule (10)				Cost (11)			
3001.A5.03 - RL Project Funded	32	32	340	0	(308)	3,722	3,722	11,525	0	(7,804)	4,039	13,940	(9,901)			
3001.A5.04 - ORP Project Funded	0	0	110	0	(110)	1,445	1,445	4,661	0	(3,217)	1,445	5,443	(3,998)			
3001.A6.01 - Portfolio PMTOs	24	24	25	0	(1)	829	829	777	0	52	1,066	1,138	(73)			
3001.A7.01 - G&A Liquidations	(1,016)	(1,016)	(1,663)	0	647	(183,329)	(183,329)	(196,626)	0	13,298	(194,540)	(212,423)	17,884			
3001.A7.02 - DLA Liquidations	(714)	(714)	(1,297)	0	583	(112,354)	(112,354)	(129,876)	0	17,522	(119,439)	(144,237)	24,799			
3001.A7.03 - Variable Pools Revenue	(5,422)	(5,422)	(6,814)	0	1,392	(622,836)	(622,836)	(637,833)	0	14,996	(676,634)	(698,726)	22,091			
3001.B1.01 - UBS Assessments for Other Providers	2	2	0	0	2	58	58	0	0	58	75	0	75			
3001.B1.02 - UBS Other MSC - HAMMER M&O	8	8	0	0	8	266	266	0	0	266	347	0	347			
3001.B1.03 - Assessment for Other Provided Services	81	81	0	0	81	2,752	2,752	0	0	2,752	3,553	0	3,553			
3001.B1.04 - Assessment for PRC Services to MSC	46	46	0	0	46	1,513	1,513	0	0	1,513	1,966	0	1,966			
3001.B1.07 - Request for Services	1	1	0	0	1	20	20	0	0	20	30	0	30			
a2. WORK BREAKDOWN STRUCTURE ELEMENT																
b2. COST OF MONEY																
c2. GENERAL AND ADMINISTRATIVE																
d2. UNDISTRIBUTED BUDGET													0			
e2. SUBTOTAL (Non - Performance Measurement Baseline)	6,923	6,923	9,240	0	(2,317)	1,065,844	1,065,844	1,170,215	0	(104,372)	1,123,769	1,257,938	(134,168)			
f. MANAGEMENT RESERVE											5,370	5,370	0			
g. TOTAL	21,828	21,782	27,479	(44)	(5,697)	3,340,544	3,339,823	3,494,560	(721)	(154,737)	3,564,085	3,795,272	(231,186)			
9. RECONCILIATION TO CONTRACT BUDGET BASE																
a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE																



5.0 FORMAT 3, DD FORM 2734/3, BASELINE

Table 5-1. Format 3, DD Form 2734/3, Baseline

CONTRACT PERFORMANCE REPORT													FORM APPROVED				
FORMAT 3 - BASELINE													OMB No. 0704-0188				
DOLLARS IN Thousands																	
<b>1. Contractor</b>			<b>2. Contract</b>				<b>3. Program</b>				<b>4. Report Period</b>						
a. Name			a. Name				a. Name				a. From (2018/10/01)						
Mission Support Alliance			Mission Support Contract				Mission Support Contract										
b. Location (Address and Zip Code)			b. Number		b. Phase		b. To (2018/10/21)										
Richland, WA 99352			RL14728		Operations												
c. TYPE			d. Share Ratio		c. EVMS ACCEPTANCE												
CPAF					No X Yes												
<b>5. CONTRACT DATA</b>																	
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)	
\$2,854,966				\$709,119		\$3,564,085		\$0				\$3,564,085		\$3,564,085		\$0	
h. CONTRACT START DATE				i. CONTRACT DEFINITIZATION DATE				j. PLANNED COMPLETION DATE				k. CONTRACT COMPLETION DATE		l. ESTIMATED COMPLETION DATE			
2009/05/24				2009/05/24				2019/05/25				2019/05/25		2019/05/25			
<b>6. PERFORMANCE DATA</b>																	
ITEM	BCWS CUMULATIVE TO DATE	BCWS FOR REPORT PERIOD	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)														
			Six Month Forecast By Month										Remaining FY19	UNDISTRIBUTED BUDGET	TOTAL BUDGET		
			Nov FY19	DEC FY19	Jan FY19	Feb FY19	Mar FY19	Apr FY19	May FY19	(11)	(12)	(13)					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)		
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	2,259,796	14,029	23,357	19,753	16,024	20,173	24,519	19,294	38,001						2,889	2,437,835	
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	14,905	(14,029)	(95)	1,560	4,169	(1,039)	(4,144)	(66)	(1,261)						(2,889)	(2,889)	
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)	2,274,701		23,262	21,313	20,193	19,134	20,376	19,228	36,740						0	2,434,946	



Table 5-1, cont. Format 3, DD Form 2734/3, Baseline

DOLLARS IN Thousands													FORM APPROVED OMB No. 0704-0188		
1. Contractor		2. Contract			3. Program				4. Report Period						
a. Name Mission Support Alliance		a. Name Mission Support Contract			a. Name Mission Support Contract				a. From (2018/10/01)						
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728			b. Phase Operations				b. To (2018/10/21)						
		c. TYPE CPAF	d. Share Ratio		c. EVMS ACCEPTANCE No X Yes										
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												
			Nov FY19 (4)	DEC FY19 (5)	Jan FY19 (6)	Feb FY19 (7)	Mar FY19 (8)	Apr FY19 (9)	May FY19 (10)	(11)	(12)	(13)			Remaining FY19 (14)
a2. NON - PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	1,058,921	5,449	9,036	7,401	6,387	8,025	9,706	7,959	9,452					0	1,122,334
b2. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	6,923	(5,449)	(20)	607	1,619	(457)	(1,642)	(67)	(79)					0	1,435
c2. NON - PERFORMANCE MEASUREMENT BASELINE (End of Period)	1,065,844		9,016	8,008	8,006	7,567	8,063	7,892	9,373					0	1,123,769
7. MANAGEMENT RESERVE															5,370
8. TOTAL	3,340,544	0	32,278	29,321	28,199	26,701	28,439	27,120	46,113					0	3,564,085



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

Table 6-1, Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract	3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract	a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728	b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio NO X YES	
5. Evaluation			

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

**Current Month Cost Variance (CV):**

**3001.01.01 Safeguards and Security** – Unfavorable CM CV is primarily due to implementation of the Graded Security Protection Policy that significantly increased manpower requirements and the bid assumption that the Spent Nuclear Material (SNM) would be shipped off the Hanford site by year 3. This policy was subsequent to the MSA baseline proposal and implementation.

**3001.01.02 Fire and Emergency** – Unfavorable CM CV is primarily due to the approved Integrated Investment Portfolio (IIP) funded scope being divergent from the contract baseline because of a budgeting omission for platoon shift hours in the Hanford Fire Department and the bid assumption for the closure of multiple fire stations.

**3001.01.04 HAMMER** – Unfavorable CM CV is primarily due to the assumption that less Environmental Management (EM) funding would be required because HAMMER could self-fund itself by performing enough services for non-Hanford entities. The assumption that was included in the proposal has not occurred. As a result, the EM budget will remain lower than the EM funds authorized. This divergent situation will remain unchanged and will continue to increase. Because services at HAMMER are consistent with the approved IIP scope, there has been no adverse impact to service delivery.

**3001.02.03 Public Safety & Resource Protection** – Unfavorable CM CV is primarily due to the approved funding and IIP scope being divergent from the baseline. In particular, the baseline budget does not include software upgrades to Automated Bar Coding of All Samples at Hanford (ABCASH).

**3001.03.02 Information Systems** – Favorable CM CV is primarily due to continued savings from self-performance of Software Engineering Services.

**3001.03.03 Infrastructure/Cyber Security** – Unfavorable CM CV at the Hanford Site is primarily due to the approved funding and IIP scope being divergent from the baseline. In particular, the baseline budget does not include Unclassified Cyber Security.

**3001.04.03 Electrical Services** – Unfavorable CM CV is primarily due to staffing levels that are higher than the baseline due to additional maintenance activities required to maintain the electrical distribution system. The system has degraded across the site due to age. Electrical Services are part of the Enhanced Maintenance Program (EMP) where compliance issues have increased the cost to the program.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**3001.04.04 Water/Sewer Services** – Unfavorable CM CV is due to staffing levels that are higher than the baseline due to additional maintenance activities required to maintain the water and sewer distribution system. The system has degraded across the site due to age. Water and Sewer Utilities (W&SU) is part of the EMP and has compliance issues that have increased the cost to the program.

**3001.08.01 Water System** – Favorable CM CV is primarily due to the construction subcontractor costs being less than estimated and budgeted on project L-894 “Raw Water Cross Connect Isolation 200E/W”.

**Variable Service Pools - Non-PMB** – The WBS elements 3001.01.04 – 3001.06.06 represents the usage-based pool, General and Administrative (G&A), and Direct Labor Adder (DLA) accounts. Offsetting liquidation of service to customers occur with the liquidation of WBS 3001.A7.01-3001.A7.03.

**Impacts – Current Month Cost Variance:**

MSA has operated at authorized FY 2019 funding levels that exceed the contract budget. There are no impacts associated with this unfavorable CM CV.

**Corrective Action – Current Month Cost Variance:** None

**Current Month Schedule Variance:**

**3001.08.01 Water System** – Favorable CM SV is due to project L-894, “Raw Water Cross Connect Isolation 200 E/W”, early procurement and delivery of 30-inch piping.

**3001.08.03 Electrical System** - Unfavorable CM SV is due to project L-801, “Upgrade SCADA”, where Contracts directed creating a new RFP Statement of Work to be re-competed from the end of the original contract (definitive design through installation and project closeout). This decision took six weeks to develop and the project was unable to move forward causing the schedule delay.

**3001.08.05 Facility Systems** – Unfavorable CM SV is due to project L-888, “400 Area Fire Station”. A planned BCR will align the Architect-Engineer conceptual design schedule into P6. In addition, a delay with project L-796, “Key Facilities Roof Replacements”, occurred due to the subcontractor unable to begin MO-256 work on 10/1/18 (part of the construction contract award agreement), but did start on 10/22/18.

**Impacts – Current Month Schedule Variance:** Impacts are minimal because each Reliability Project is an independent stand-alone project.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**Corrective Action – Current Month Schedule Variance:** None.

**Cumulative Cost Variance:** Several key areas contributing to the cumulative-to-date CV (CTD CV) are as follows:

**Fiscal Year Funding Authorizations:** During October of 2011, MSA completed re-aligning the baseline to the negotiated contract and by using the approved change control process, implemented the re-aligned baseline data. RL provided approval of the baseline data for reporting progress, and provided an approved and funded integrated investment plan of items for MSA work scope. The CTD CV is primarily due to RL approved funding and IIP scope being divergent from the baseline for FY 2017, 2018, and FY 2019. Submittal of proposals for the FY 2017 variances occurred in October 2018, and proposals for FY2018 are currently in development.

**3001.01.01 Safeguards and Security -** Unfavorable CTD CV is primarily due to differences in the baseline budgeting and FY IIP authorizations. For example, Safeguards and Security proposed a baseline planning assumption to implement a graded security policy at a reduced cost and the bid assumption for shipping Spent Nuclear Material (SNM) off the Hanford site by year three. These assumptions did not materialize. Since FY IIP/funding authorizations adjust for these differences, no mitigating actions are in place at this time to reduce the overall CV.

**3001.01.02 Fire & Emergency Response -** Unfavorable CTD CV is primarily due to a budgeting omission for platoon shift hours in the Hanford Fire Department as well as the bid assumption for closure of multiple fire stations. Mitigating actions to reduce the overall CV are unnecessary at this time because FY IIP/funding authorizations adjust for these differences.

**3001.01.04 HAMMER -** Unfavorable CTD CV is predominantly due to the assumption that less EM funding would be required because HAMMER could self-fund itself by performing enough services for non-Hanford entities. This assumption has not occurred. Because of this inaccurate assumption, the EM budget will remain lower than the EM funds authorized. Because of this divergent situation, the CTD CV will continue to increase. Services delivered at HAMMER will not be adversely affected because the services are executed consistent with the approved FY IIP/funding.

**3001.03.02 Information Systems -** Favorable CTD CV is due to continued savings from self-performance of Software Engineering Services.

**3001.04.03/04 Electrical/Water and Sewer Services -** Unfavorable CTD CV is primarily due to the aging life of the infrastructure on the Hanford Site. Authorization for more staffing and material procurements than were included in the baseline occur through the FY IIP/funding process. These changes have resulted in increased costs for infrastructure repairs, compliance issues, and maintenance activities. In addition, an Enhanced Maintenance Program that improves predicting future system failures and predictive maintenance is



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis.

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

replacing the preventative maintenance method. Since FY IIP/funding authorizations adjust for these differences, mitigations are unnecessary at this time.

**3001.04.10 Technical Services** – Unfavorable CTD CV is due to multiple differences in the baseline budgeting and FY IIP authorizations. Under Sanitary Waste Management and Disposal, the Solid Waste Landfill (SWL) cap was not in the original baseline assumptions. Laundry Services incurred increased Radiation Control scans for laundry contamination. Traffic Management shipments have been greater than the baseline assumptions. The Program Management Account for Site Services has greatly expanded from the baseline assumption. Since FY IIP/funding authorizations adjust for these differences, no mitigating actions are in place at this time to reduce the overall CV.

**3001.06.01 Business Operations** - Favorable CTD CV is primarily due to credits associated with affiliate fee on information technology (IT) scope and training on overtime pending final resolution.

**3001.06.03 Safety, Health and Quality** - Unfavorable CTD CV is primarily due to the IIP scope and approved funding increases in Radiation Protection, Worker Safety & Health and Beryllium accounts. Since FY IIP/funding authorizations adjust for these differences, mitigations are unnecessary at this time.

**3001.08.01 Water System** - Favorable CTD CV is due to project L-894 “Raw Water Cross Connect Isolation 200 E/W” because the Engineering Study report cost less than planned, conceptual design utilized fewer resources than originally planned, the Definitive Design cost underrun and the construction contract were performed at lower than planned cost. Project L-840, “24in Line Replacement from 2901Y to 200W” had savings on construction subcontracts due to the contractor’s expertise in this type of construction and encountering significantly less difficult site conditions. Project L-419 “Line Renovation/Replacement from 2901U to 200E” had a fixed price contract, which was awarded/completed at a lower cost than budgeted. Projects L-399 “T-Plant Potable & Raw Water Line Rest,” L-525 “24-inch Line Replacement from 2901Y to 200W”, and L-311 “Refurbish 200W Raw Water Reservoir” also contributed to this favorable variance.

**3001.A1 – 3001.B1 Non-PMB** - Unfavorable CTD CV is primarily due to other Hanford contractors and government agencies requesting more usage-based services (i.e., Training, Crane & Rigging, Fleet Services, Occupancy, etc.) than planned in the baseline. Since this work scope is providing services as requested and provides full authorization through the ICWO/RFS process, no mitigations are necessary at this time. Note that for the non-PMB, the WBS elements 3001.01.04 - 3001.06.06 represent the Usage-Based Pool, General and



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

Administrative (G&A), and Direct Labor Adder (DLA) accounts that are offset by the liquidation of services to customers through WBS 3001.A7.01 – 3001.A7.03.

**Impacts – Cumulative Cost Variance:** CTD CV is primarily due to approved funding and priority list scope being divergent from the baseline during FY 2017, FY 2018, and FY 2019. Because the work scope is primarily level of effort, the CTD CV is not a predictive indicator for future performance. The amount of support provided in the future will be dependent upon the RL approved funding and priority list scope.

**Corrective Action - Cumulative Cost Variance:**

For FY 2009 – FY 2016, MSA has incorporated negotiated contract variance proposals into the contract baseline. Approval and implementation of Contract Modification 709 for the FY17 Pension cost proposal occurred in June 2018. Submittal of the FY 2018 and FY 2019 Pension Change Proposals occurred in July 2018, and are currently pending final negotiations. The FY 2017 Cost Variance Proposal and the FY 2017 REA included the 2017 Labor Adder Proposal and occurred in October 2018. Proposals for FY 2018 are currently in development. For FY 2019, MSA will continue to monitor the delta values between the contract baseline and RL funding values to determine if change proposals are necessary. Until negotiations of these charges occur, the divergent data will continue. Note that the FY 2009 through FY 2016 proposals excluded WBS 3001.08, Infrastructure Reliability Projects.

**Cumulative Schedule Variance:**

**3001.08.01 Water System** – Favorable CTD SV is primarily due to project L-894, “Raw Water Cross Connect Isolation 200 E/W”, because the procurement and delivery of the 30-inch pipe occurred earlier than scheduled.

**3001.08.02 Sewer System** – Unfavorable CTD SV on project L-854, “200E Sewer Consolidations”, is due to re-planning of pipe and structure installation for Phases 5 and 6 to accommodate the operation schedule of other Hanford contractors, which may have a final three-week schedule slip. L-853, “200E Sewer Flow Equalization Facility”, SV is due to bird nest issues delaying completion of construction closeout activities, as well as the re-planning of Phase 6 to accommodate construction activities associated with another Reliability Project.

**3001.08.03 Electrical System** – Unfavorable CTD SV is because L-801, “Upgrade SCADA”, contracts required additional justification prior to awarding the modified contract statement of work resulting in a one-month schedule slip. L-791, “RFL Transfer Trip Upgrades”, A6 substation work slipped due to OHC interface issues that are currently being resolved. In addition, the early start of A8 substation work partially offset the A6 delay.



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**3001.08.05 Facility Systems** – Unfavorable CTD SV is due to project L-888, “400 Area Fire Station. A planned BCR will align the Architect-Engineer conceptual design schedule into P6. SV with project L-796, “Key Facilities Roof Replacements”, is due to the subtier contractor not able to begin MO-256(M)-257 work on 10/1/18 (part of the construction contract award agreement) but did start on 10/22/18.

**Impacts - Cumulative Schedule Variance:** Impacts to Reliability Projects are minimal because each is an independent stand-alone project.

**Corrective Action – Cumulative Schedule Variance:** No corrective action is required because each project is stand-alone.

**Variance at Complete:**

During October of 2011, MSA completed re-aligning the baseline to the negotiated contract, and using the approved change control process, implemented the re-aligned baseline data. RL provided approval of the baseline data for reporting progress and provided an approved and funded priority list of items for MSA work scope. The VAC is primarily due to the RL approved funding and priority list scope being divergent from the baseline for FY2017, FY2018 and FY 2019.

After the original submittal of the forward pricing rates (FPR), it was determined that MSA had incorrectly factored the cost of the Hanford Site Pension Plan (HSPP) and the Hanford Employee Welfare Trust (HEWT) into the labor rates. This disclosure to MSA occurred in the Source Selection Evaluations Board’s (SEB) Debrief of the Mission Support Contract (MSC) in May 2009. MSA received contract modifications associated with pension cost and labor adder adjustments for FY 2009 through FY 2016 and FY 2017 pension cost which increased the contract value. Submittal of the FY 2018 and FY 2019 Pension Change Proposals occurred in July 2018 and are currently pending final negotiations. Proposals for FY 2018 are also in development.

**Impacts – At Complete Variance:**

The VAC is primarily due to the approved funding and priority list scope being divergent from the baseline during FY 2017 – FY 2019. Because the work scope is primarily level of effort, the VAC is not a predictive indicator for future performance. The amount of support provided in the future will be dependent upon RL approved funding and priority list scope.

**Corrective Action - At Complete Variance:**

For FY 2009 – FY 2016, MSA has incorporated negotiated contract variance proposals into the contract baseline. Submittal of the FY 2017 REA submission for increases in the 3001.A1 Transfer WBS elements and the FY 2017 Cost Variance Proposals occurred in October 2018. Submittal of the FY 2018 and FY 2019 Pension Change Proposals occurred in July 2018 and are currently pending final negotiations. Proposals for FY 2018 are currently in development and for FY 2019 MSA will continue to monitor the delta values between the contract



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

1. Contractor	2. Contract		3. Program	4. Report Period
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
<b>5. Evaluation</b>				
<p>baseline and RL funding values to determine if change proposals are necessary. Note that the FY 2009 through FY 2016 proposals excluded WBS 3001.08, Infrastructure Reliability Projects.</p> <p><b><u>Negotiated Contract Changes:</u></b> The Negotiated Contract Cost for October 2018 decreased from \$3,564.7M to \$3,564.1M. This minor change is the delta between 300 Area water and sewer credit proposal and project management task order (19-001) Hanford Site-Wide Contractor Assurance System Implementation Support Phase III.</p> <p><b><u>Changes in Estimated Cost of Authorized Unpriced Work:</u></b> The Authorized Unpriced Work (AUW) for the reporting period remained at \$0M.</p> <p><b><u>Changes in Estimated Price:</u></b> The Estimated Price of \$4,005.9M includes the Most Likely Management Estimate at Completion (MEAC) of \$3,795.3M and fee of \$210.6M. The Most Likely MEAC reflects recognition of significant additional work scope in FY 2009 through FY 2012 related to the American Recovery and Reinvestment Act of 2009 (ARRA) support activities to site contractors, and other DOE-authorized activities beyond the original contract assumptions. BCRs submitted in January 2015, implemented the Cost Variance Contract Modifications received for FY 2009 thru FY 2012. BCRs submitted in March 2018, implemented Cost Variance Contract Modifications received for FY 2013 - FY 2016 that increased the negotiated contract costs. The FY 2017 REA, submitted in October 2018, for increases in the 3001.A1 Transfer WBS elements was because the FY 2017 authorized funding was higher than the Contract Budget Base by more than the 10% threshold from Section B.5 of the MSA contract. Submittal of the FY 2017 Cost Variance Proposals also occurred in October 2018. Since FY 2018 authorized funding was higher than the Contract Budget Base, a FY 2018 submittal for both a REA and cost variance proposal is expected.</p> <p><b><u>Differences between Current Month and Prior Month EAC's Format 1, Column (13) (e):</u></b> During this reporting period, the Estimate at Completion (EAC) increased by \$74.8M from \$3,720.5M to \$3795.3M: \$36.9M in the Performance Measurement Baseline (PMB), \$37.1M in the non-PMB and \$.8M in management reserve. Key areas where the EAC increased significantly above the budget include: Labor and Pension rates for FY 2019 are significantly higher than the budgeted rates; Safeguards and Security funding for implementing a Graded Security Protection Policy; the Hanford Fire Department omission of platoon shift in the original proposal; and Water/Electrical Utilities costing more because of an aging degraded system and implementation of an enhanced maintenance program. The non-PMB EAC changes for FY 2019 primarily reflect trending data from the Other Hanford Contractors (OHC), CH2M Hill Plateau Remediation Company (CHPRC) &amp; Washington River Protection Project (WRPS).</p>				



Table 6-1, cont. Format 5, DD Form 2734/5, Explanations and Problem Analysis

<b>1. Contractor</b>	<b>2. Contract</b>		<b>3. Program</b>	<b>4. Report Period</b>
a. Name Mission Support Alliance	a. Name Mission Support Contract		a. Name Mission Support Contract	a. From (2018/10/01)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/10/21)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
<b>5. Evaluation</b>				

**Differences in the Performance Measurement Baseline:**  
 This reporting period the Performance Measurement Baseline decreased by \$2.9M from \$2,437.8M to \$2,434.9M. The decrease was primarily due to the implementation of Mod 745 – Incorporate 300 Area Water and Sewer Credit Proposal. This change eliminated the undistributed budget, and transferred \$1,174.8M to the non-PMB consistent with the credit proposal. The following BCRs related to Reliability Project adjusted time phasing, but did not change the PMB:

- VMSA-19-003 – Move Budget from Reliability Project Out-Year Planning Package to FY 2019 Spares Inventory Account
- RL0201MR-19-001 – Administrative BCR - Move RL-0201 Reliability Projects Management Reserve from FY 2018 to May 2019

**Differences in the Non - Performance Measurement Baseline:**  
 This reporting period the non - Performance Measurement Baseline increased by \$1.4M from 1,122.3M to 1,123.7M. The increase was primarily due to implementation of BCR VMSA-19-005 adding budget of \$1,174.8M to the non-PMB related to Mod 745 – Incorporate 300 Area Water and Sewer Credit Proposal and VPMTO-19-001 – Mod 741, Definitization of PMTO 19-001, Hanford Site-Wide Contractor Assurance System Implementation Support Phase III.

**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. The Most Likely MEAC reflects the EAC including MR. The Worst Case Scenario assumes a 5 percent increase to the Most Likely MEAC case scenario.

7.0 USAGE-BASED SERVICES/DIRECT LABOR ADDER SUMMARY

The Direct Labor Adder (DLA) 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 7-1. Usage-Based Services/Direct Labor Adder Summary (dollars in thousands).

Fiscal Year 2019 to Date – October 2018					
Account Description	BCWS	BCWP	ACWP	CV	Liquidation
<b>Direct Labor Adder</b>					
Software Engineer Services DLA (3001.03.02.03)	\$145.0	\$145.0	\$217.1	\$(72.1)	\$(153.5)
Content & Records Management DLA (3001.03.01.04)	\$49.3	\$49.3	\$51.4	\$(2.1)	\$(47.6)
Transportation DLA (3001.04.06.02)	\$110.4	\$110.4	\$368.3	\$(257.9)	\$(422.6)
Maintenance DLA (3001.04.05.02)	\$358.0	\$358.0	\$617.1	\$(259.1)	\$(595.4)
Janitorial Services DLA (3001.04.05.03)	\$63.0	\$63.0	\$97.8	\$(34.8)	\$(78.0)
<b>Total Direct Labor Adder</b>	<b>\$725.7</b>	<b>\$725.7</b>	<b>\$1,351.7</b>	<b>\$(626.0)</b>	<b>\$(1,297.1)</b>

ACWP = Actual Cost of Work Performed.      CV = Cost Variance      BAC = Budget at Completion.      FYTD = Fiscal Year to Date  
 BCWP = Budgeted Cost of Work Performed.      BCWS = Budgeted Cost of Work Scheduled.



Table 7-1, cont. Usage-Based Services/Direct Labor Adder Summary (dollars in thousands).

Fiscal Year 2019 to Date – October 2018					
Account Description	BCWS	BCWP	ACWP	CV	Liquidation
<b>Usage Based Services</b>					
Training (3001.01.04.02)	\$519.7	\$519.7	\$906.2	\$(386.5)	\$(795.2)
HRIP (3001.02.04.02)	\$379.7	\$379.7	\$212.4	\$167.3	\$(426.4)
Dosimetry (3001.02.04.03)	\$388.9	\$388.9	\$436.6	\$(47.7)	\$(419.5)
Information Technology Services (3001.03.07.01)	\$1,770.7	\$1,770.7	\$2,674.7	\$(904.0)	\$(2,539.5)
Work Management (3001.04.13.01)	\$-	\$-	\$22.8	\$(22.8)	\$(11.4)
Courier Services (3001.04.15.02)	\$13.4	\$13.4	\$13.7	\$(0.3)	\$(12.4)
Occupancy (3001.04.14.06)	\$446.1	\$446.1	\$696.2	\$(250.1)	\$(841.1)
Crane & Rigging (3001.04.08.02)	\$612.8	\$612.8	\$777.2	\$(164.4)	\$(880.1)
Guzzler Trucks (3001.04.06.03)	\$5.1	\$5.1	\$-	\$5.1	\$-
Fleet (3001.04.07.02)	\$487.8	\$487.8	\$1,191.7	\$(703.9)	\$(888.6)
<b>Total UBS</b>	<b>\$4,624.2</b>	<b>\$4,624.2</b>	<b>\$6,931.5</b>	<b>\$(2,307.3)</b>	<b>\$(6,814.2)</b>
<b>Total DLA / UBS</b>	<b>\$5,349.9</b>	<b>\$5,349.9</b>	<b>\$8,283.2</b>	<b>\$(2,933.3)</b>	<b>\$(8,111.3)</b>

ACWP = Actual Cost of Work Performed.

CV = Cost Variance

BAC = Budget at Completion.

BCWP = Budgeted Cost of Work Performed.

BCWS = Budgeted Cost of Work Scheduled.

FYTD = Fiscal Year to Date

**FYTD Variance** – (\$2.9M) The DLA variance is (\$0.6M) and driven by the labor costs of the Transportation and Facility Maintenance accounts exceeding baseline budget, as both organizations' headcount and resultant charges are well in excess of the initial baseline bid plan in response to ongoing OHCs service requests to meet Site project needs. The UBS variance of (\$2.3M) is a result of timing of procurement charges and an overall increase in UBS demand services from the initial baseline plan. IT reflects a (\$0.9M) overrun due to the one-time costs of annual material and subcontract obligations vs a BCWS level spread plan budget of those resources. Other accounts such as Fleet, Training, and Occupancy are a combined (\$1.3M) over budget, as those usage based service accounts are all reflecting a level of service to the OHCs, with resultant increased costs, well over the initial baseline bid plan.



8.0 RELIABILITY PROJECT STATUS

Activity in October was centered on continuing progress on projects carried over from FY 2018. (Table 8-1 below.)

Table 8-1. Current Active Reliability Projects Summary

Projects to be Completed (\$000's)															
Work Scope Description (Reliability Projects)	Contract to Date - Performance							Project Lifecycle				Completion Dates			VAC Cost
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC	% Complete	Baseline Complete Date	Forecast Date	Schedule at Complete	
L-850, Replace 200W 1.1M-gal PW Tank	774.0	485.9	363.1	(288.1)	122.8	0.6	1.3	778.1	460.7	317.4	62.4%	11/05/18	2/28/19	R	G
L-849, Replace 200E 1.1M-gal PW Tank	763.1	475.0	399.8	(288.1)	75.2	0.6	1.2	767.3	646.7	120.5	61.9%	11/05/18	2/28/19	R	G
L-894, Raw Water Cross Connection Isolation 200E/W	3,759.7	5,820.2	4,641.1	2,060.5	1,179.1	1.5	1.3	7,669.1	5,851.6	1,817.5	75.9%	5/23/19	5/20/19	G	G
L-895, Fire Protection Infrastructure for Plateau Raw Water	1,063.8	1,042.4	984.0	(21.5)	58.3	1.0	1.1	3,570.6	3,862.4	(291.8)	29.2%	3/21/19	4/29/19	Y	Y
L-357, Replace 12" Potable Water Line to 222-S Lab	1,431.6	344.0	257.3	(1,087.7)	86.7	0.2	1.3	1,654.4	1,254.2	400.2	20.8%	1/03/19	4/22/19	R	G
L-781, 181D Vertical Turbine Pumps	7.5	8.6	7.3	1.1	1.3	1.2	1.2	605.7	599.4	6.3	1.4%	5/23/19	5/23/19	G	G
L-897, Central Plateau Water Treatment Facility	755.0	758.3	415.7	3.4	342.6	1.0	1.8	1,901.3	1,553.4	348.0	39.9%	5/23/19	5/23/19	G	G
L-826, 181B Vertical Turbine Pumps	7.5	8.6	4.0	1.1	4.6	1.2	2.2	605.7	596.1	9.6	1.4%	5/23/19	5/23/19	G	G
L-853, 200E Sewer Flow Equalization Facility	5,662.8	5,568.3	5,133.6	(94.5)	434.7	1.0	1.1	5,713.2	5,577.4	135.8	97.5%	1/28/19	2/07/19	Y	G
L-854, 200E Sewer Consolidations	4,741.9	4,452.4	3,941.7	(289.5)	510.7	0.9	1.1	5,641.0	4,737.1	903.9	78.9%	1/08/19	2/13/19	Y	G
L-789, Prioritize T&D Sys Wood PP Test & Replace	2,202.3	2,198.7	2,116.5	(3.5)	82.3	1.0	1.0	2,202.3	2,124.0	78.3	99.8%	9/27/18	11/15/18	Y	G
L-815, Upgrade Transmission/Distrib Access Rds	1,517.4	1,517.4	985.2	0.0	532.2	1.0	1.5	1,517.4	985.2	532.2	100.0%	9/27/18	9/27/18	G	G
L-612, 230kV Transmission System Reconditioning and Sustainability Repairs	1,187.2	1,187.2	940.4	(0.0)	246.7	1.0	1.3	1,211.4	1,055.9	155.5	98.0%	5/23/19	7/08/19	R	G
L-898, 100 Area Mission Crit. Dist. Feeders Repl	3.4	0.0	0.0	(3.4)	0.0	0.0	0.0	206.6	0.4	206.2	0.0%	3/28/19	12/09/19	R	G
L-801, Upgrade SCADA	300.2	24.1	9.5	(276.0)	14.6	0.1	2.5	726.4	729.4	(3.0)	3.3%	12/20/18	2/28/19	R	G
L-791, RFL Transfer Trip Upgrades	173.0	112.3	84.1	(60.7)	28.2	0.6	1.3	602.1	601.7	0.3	18.7%	3/29/19	5/20/19	Y	G
L-720, Outdoor Lighting Reconfiguration and Repl	2.7	21.0	5.2	18.3	15.8	7.8	4.0	188.8	184.5	4.3	11.1%	5/23/19	3/27/19	G	G
L-888, 400 Area Fire Station	568.2	287.3	193.1	(280.9)	94.2	0.5	1.5	1,031.0	925.8	105.2	27.9%	4/18/19	6/19/19	R	G
S-245, Live Fire Shoot House	3,653.2	3,635.7	3,736.9	(17.5)	(101.1)	1.0	1.0	3,653.2	3,816.3	(163.1)	99.5%	10/10/18	11/15/18	Y	Y
L-796, Key Facilities Roof Replacements	230.6	96.7	106.6	(133.9)	(10.0)	0.4	0.9	262.6	266.2	(3.6)	36.8%	1/30/19	10/26/18	G	G
L-906, HFD Station 92 Expansion	1.9	0.6	5.6	(1.3)	(5.0)	0.3	0.1	149.5	169.5	(20.0)	0.4%	4/10/19	4/18/19	Y	G
ET51, HLAN Network Upgrade - Phase 2A	3,422.7	3,471.8	3,490.5	49.1	(18.7)	1.0	1.0	3,666.8	3,662.6	4.2	94.7%	1/31/19	1/31/19	G	G
L-905, FARS & RFARS Replacement & Upgrade	67.9	59.4	42.4	(8.5)	16.9	0.9	1.4	210.0	194.6	15.4	28.3%	4/10/19	5/21/19	Y	G
<b>Total</b>	<b>32,297.3</b>	<b>31,575.8</b>	<b>27,863.6</b>	<b>(721.5)</b>	<b>3,712.2</b>	<b>1.0</b>	<b>1.1</b>	<b>44,534.4</b>	<b>39,855.1</b>	<b>4,679.3</b>					

Variance at Complete Cost Performance		Schedule at Complete Performance	
OK - G	Underspent or 1-10% over	OK - G	On schedule
Over Spent Y	11-30% or \$100K Over Spent	Behind Y	Within 30 days
Over Spent R	>30% or \$300K Over Spent	Behind R	Critical Path at Risk



## RELIABILITY STATUS, CONT.

### Reliability Projects Variance Explanations

#### Contract-to-Date (CTD) Schedule Variances (SV):

- L-850, *Replace 200W 1.1M-gal PW Tank*: Unfavorable SV is due to additional analysis of fire water demands on the Central Plateau, which delayed the design progress. Currently, action is being taken to expedite design activities to recover schedule as shown in the critical path analysis. The SV is largely unrecoverable during current baselined design activities. There is no current impact to the construction schedule because there is no funding for construction in FY 2019.
- L-849, *Replace 200E 1.1M-gal PW Tank*: Unfavorable SV is due to additional analysis of fire water demands on the Central Plateau, which delayed design progress. Currently, action is being taken to expedite design activities to recover schedule as shown in the critical path analysis. The SV is largely recoverable during current baselined design activities. There is no current impact to the construction schedule because there is no funding for construction in FY 2019.
- L-894, *Raw Water Cross Connection Isolation 200E/W*: Favorable SV is chiefly due to the procurement and delivery of the 30-inch pipe earlier than scheduled.
- L-357, *Replace 12" Potable Water Line to 222-S Lab*: Unfavorable SV is due to delays in approving the Washington Administrative Code (WAC) Project Report, which delayed award of the construction subcontract and subsequent construction activities.
- L-853, *200E Sewer Flow Equalization Facility*: Unfavorable SV is due to delayed completion of construction activities associated with the main lift station (MLS), and baseline construction closeout activities due to bird nest issues. Additionally, work scheduled on Phase 6 was re-planned to accommodate construction activities associated with another reliability project.
- L-854, *200E Sewer Consolidations*: Unfavorable SV is due to the re-planning of pipe and structure installation(s) on Phases 5 and 6 to accommodate the operation schedules of other Hanford contractors (OHCs).
- L-801, *Upgrade SCADA*: Unfavorable SV is due to the current contract modification where Contracts directed creating a new RFP Statement of Work to be re-competed from the end of the original contract (definitive design through installation and project closeout). This decision took six weeks to develop and the project was unable to move forward causing the schedule delay.



- L-791, *RFL Transfer Trip Upgrades*: Unfavorable SV is because A6 substation work slipped due to OHC interface issues that are currently being resolved. However, these issues have been resolved and a recovery plan is being implemented. In addition, the early start of A8 substation work partially offset the A6 delay.
- L-888, *400 Area Fire Station*: Unfavorable SV is because the strategy and number of additional activities in preparation of the conceptual design is more extensive than planned and has required more time to complete. A Baseline Change Request (BCR) will be processed to support replanning and accelerating new activities from the Architecture/Engineering (A/E) design schedule.
- S-796, *Key Facilities Roof Replacements*: Unfavorable SV is due to not performing construction work on Buildings MO-256 and MO-257 as planned. The sub-tier contractor was not available to start work until the beginning of FY 2019 (part of the construction contract award agreement). Work on buildings MO-256 & MO-257 began on October 22, 2108.

## CTD Cost Variances (CV):

- L-850, *Replace 200W 1.1M-gal PW Tank*: Favorable CV is due to the award of the Engineering Design subcontract at favorable cost value, lower than the budgeted amount.
- L-849, *Replace 200E 1.1M-gal PW Tank*: Favorable CV is due to the award of the Engineering Design subcontract at favorable cost value, lower than the budgeted amount.
- L-894, *Raw Water Cross Connection Isolation 200E/W*: Favorable CV is due to the engineering study report costing less than planned, the conceptual design utilizing fewer resources than originally anticipated, a Definitive Design cost underrun, and the construction contract being performed at lower than planned cost.
- L-895, *Fire Protection Infrastructure for Plateau Raw Water*: Favorable CV is primarily attributable to realized cost efficiencies associated with the design procurement method and various underruns in project support costs. New information indicates substantial A/E design costs of ~\$260K are yet to be received.
- L-357, *Replace 12" Potable Water Line to 222-S Lab*: Favorable CV is due to subcontractor design efficiencies in development of the 30% and 90% design. Efficiencies are associated with initial planning performed by the engineering project support team. These efficiencies included pre-conceptual line routing and clarifying operational requirements. Also, early communications and cooperation



with OHCs by the integrated project team (IPT) addressing concern/design inputs avoided potential rework.

- L-897, *Central Plateau Water Treatment Facility*: Favorable CV is due to the conceptual design contract awarded for less than baseline value. The design subcontractor's experience, and their ability to self-perform all scope without sub-tier support, was a key factor in the contractor award.
- L-853, *200E Sewer Flow Equalization Facility*: Favorable CV is because the fixed price subcontract was awarded lower than the baseline value. The favorable CV is forecast to remain through the life of the project.
- L-854, *200E Sewer Consolidations*: Favorable CV is due to efficiencies in project support, and because the fixed price subcontract was awarded for less than the budget value. The favorable CV is forecast to remain through the life of the project.
- L-789, *Prioritize T&D Sys Wood PP Test & Replace*: Favorable CV is primarily due to the Test & Treat implementation contract that was issued at less than the planned value.
- L-815, *Upgrade Transmission/Distrib Access Rds*: Favorable CV is due to realized efficiencies because of the short-haul from the stockpile and needing less crushed rock than estimated on Phase 1 and Phase 2.
- L-612, *230kV Transmission System Reconditioning and Sustainability Repairs*: Favorable CV is due to the subcontracted conceptual design completing with a significantly favorable CV. However, the start of definitive design has been extended due to the Memorandum of Agreement (MOA), Environmental Assessment (EA), and Findings of No Significant Impact (FONSI) delays. A realignment BCR was processed in July to bring the schedule and forecast in line with the Bonneville Power Administration's (BPA's) definitive design schedule.
- L-888, *400 Area Fire Station*: Favorable CV is due to the difference between the budgeted amount for the 30% design development and the contract award value.
- S-245, *Live Fire Shoot House*: Unfavorable CV is primarily due to costs from the City of Richland (WA) to modify power to the Live Fire Shoot House site, training expenses, and additional value added labor hours for project support, that were not captured in the baseline.



## Variations at Completion (VAC) (Threshold: +/- \$750K):

- L-850, *Replace 200W 1.1M-gal PW Tank*: Favorable VAC is due to the engineering design subcontract being awarded lower than the budgeted value. Additional design elements identified at the 30% design review have increased the forecast design cost (EAC) causing a VAC decrease from the prior month.
- L-849, *Replace 200E 1.1M-gal PW Tank*: Favorable VAC is due to the engineering design subcontract being awarded lower than the budgeted value. Additional design elements identified at the 30% design review have increased the forecast design cost (EAC) causing a VAC decrease from the prior month.
- L-894, *Raw Water Cross Connection Isolation 200E/W*: Favorable VAC is due to the receipt of favorable award pricing for the firm fixed price construction subcontract, and lower A/E costs than planned.
- L-895, *Fire Protection Infrastructure for Plateau Raw Water*: Unfavorable VAC is because the variable frequency drive (VFD) quotes were higher than budgeted. In addition, overruns in engineering support during the fire water demand/pump decision time period were previously offset positively by underruns in A/E support. New information is indicating substantial A/E design costs of ~\$260K are yet to be received. Actual costs for subcontracted A/E design activities are being resolved which will impact the VAC in the future.
- L-357, *Replace 12" Potable Water Line to 222-S Lab*: Favorable VAC is due to subcontractor efficiencies in early design development efforts, and the award of a favorable construction subcontract. The VAC was reduced from the previous reporting period to reflect forecasted labor support in FY19.
- L-897, *Central Plateau Water Treatment Facility*: Favorable VAC is due to the contract award for procurement of conceptual design services being ~\$325K lower than the budget value.
- L-853, *200E Sewer Flow Equalization Facility*: Favorable VAC is due to forecast construction phase efficiencies largely due to receiving a fixed price construction proposal and awarding contract. The VAC reflects ~\$235K in change orders that are currently being reviewed.
- L-854, *200E Sewer Consolidation*: Favorable VAC is due to forecasted construction phase efficiencies based on receiving a fixed price construction proposal and contract award. The VAC does not include pending change orders from the



construction subcontract, which are currently being analyzed by an independent cost analyst.

- L-789, *Prioritize T&D Sys Wood PP Test & Replace*: Favorable VAC is due to the contract value for the test and treat scope being lower than the budgeted value.
- L-815, *Upgrade Transmission/Distrib Access Rds*: Favorable VAC is due to realized efficiencies because of the short-haul from the stockpile and needing less crushed rock than estimated on Phase 1 and Phase 2 as well as other cumulative positive cost variances.
- L-612, *230kV Transmission System Reconditioning and Sustainability Repairs*: Favorable VAC is due to completing the conceptual design subcontract for significantly less than planned. The VAC also reflects the delay in design has extended work scope beyond the May 2019 contract period.
- L-898, *100 Area Mission Crit. Dist. Feeders Repl.*: The reported EAC is only through the MSC May 2019 contract period. This project currently extends beyond May 2019, so a VAC reflecting the actual EAC (~\$202.2K), is \$4.4K.
- L-888, *400 Area Fire Station*: The reported EAC is only through the MSC May 2019 contract period. This project currently extends beyond May 2019, so a VAC reflecting the actual EAC (~\$972.9K), is \$58.1K. The favorable VAC is due to efficiencies in executing the design contract.
- L-245, *Live Fire Shoot House*: Unfavorable VAC is due to costs from the City of Richland to modify power to the Live Fire Shoot House site, training expenses, and additional labor hours for project support, that were not captured in the baseline.

Table 8 -2. Reliability Projects Schedule

RPSUM CU - Summary RP Schedule for Melodee - Current Layout: MSA - Summ RP Sched - Melodee - CU		Mission Support Alliance							Page 1 of 2				
Activity ID	Activity Name	OD	RD	% Comp	Baseline Start	Baseline Finish	Forecast Start	Forecast Finish	5	2016	2017	2018	2019
ET-51	ET-51, HLAN Network Upgrade - Phase 2A	418	69	94.7%	05-Jun-17	31-Jan-19	05-Jun-17 A	31-Jan-19					
L-357	L-357, Replace 12" Potable Water Line to 222-S Lab	378	125	20.8%	03-Jul-17	03-Jan-19	29-Jun-17 A	22-Apr-19					
L-612	L-612, 230kV Transmission System Reconditioning and Sustainability Upgrades	939	178	98%	31-Aug-15	23-May-19	31-Aug-15 A	08-Jul-19					
L-720	L-720, Outdoor Lighting Reconfiguration and Repl	112	107	11.1%	15-Oct-18	23-May-19	01-Oct-18 A	27-Mar-19					
L-781	L-781, 181D Vertical Turbine Pumps	163	148	1.4%	01-Oct-18	23-May-19	01-Oct-18 A	23-May-19					
L-789	L-789, Prioritized T&D System Wood Pole Upgrades	105	19	99.8%	01-May-18	27-Sep-18	24-May-18 A	15-Nov-18					
L-791	L-791, RFL Transfer Trip Upgrades	226	145	18.7%	07-May-18	29-Mar-19	07-May-18 A	20-May-19					
L-796	L-796, Key Facilities Roof Replacements	166	5	36.8%	04-Jun-18	30-Jan-19	29-May-18 A	26-Oct-18					
L-801	L-801, Upgrade SCADA	76	88	3.3%	04-Sep-18	20-Dec-18	04-Sep-18 A	28-Feb-19					
L-815	L-815, Upgrade Transmission/Distrib Access Rds	189	0	100%	02-Jan-18	27-Sep-18	27-Dec-17 A	27-Sep-18 A					
L-826	L-826, 181B Vertical Turbine Pumps	163	148	1.4%	01-Oct-18	23-May-19	01-Oct-18 A	23-May-19					
L-849	L-849, Replace 200E 1.1M-gal PW Tank	216	88	61.9%	02-Jan-18	05-Nov-18	02-Jan-18 A	28-Feb-19					
L-850	L-850, Replace 200W 1.1M-gal PW Tank	216	88	62.4%	02-Jan-18	05-Nov-18	02-Jan-18 A	28-Feb-19					
L-853	L-853, 200E Sewer Flow Equalization Facility	867	74	97.5%	17-Aug-15	28-Jan-19	17-Aug-15 A	07-Feb-19					
L-854	L-854, 200E Sewer Consolidations	853	78	78.9%	17-Aug-15	08-Jan-19	17-Aug-15 A	13-Feb-19					

Remaining Work  
 Baseline

**MSC - Reliability Projects**  
**Summary Schedule**  
 Data Date: 21-Oct-18



Table 8 -2. Reliability Projects Schedule Cont.

RPSUM CU - Summary RP Schedule for Melodee - Current Layout: MSA - Summ RP Sched - Melodee - CU		Mission Support Alliance							Page 2 of 2				
Activity ID	Activity Name	OD	RD	% Comp	Baseline Start	Baseline Finish	Forecast Start	Forecast Finish	5	2016	2017	2018	2019
L-888	L-888, 400 Area Fire Station	245	166	27.9%	30-Apr-18	18-Apr-19	30-Apr-18 A	19-Jun-19					
L-894	L-894, Raw Water Cross Connection Isolation 200EW	540	145	75.9%	04-Apr-17	23-May-19	30-Mar-17 A	20-May-19					
L-895	L-895, Fire Protection Infrastructure for Plateau Raw Water	431	130	29.2%	05-Jul-17	21-Mar-19	05-Jul-17 A	29-Apr-19					
L-897	L-897, Central Plateau Water Treatment Facility	374	148	39.9%	29-Nov-17	23-May-19	29-Nov-17 A	23-May-19					
L-898	L-898, 100 Area Mission Crit. Dist. Feeders Repl	285	285	0%	01-Oct-18	28-Mar-19	22-Oct-18*	09-Dec-19					
L-905	L-905, FARS & RFARS Replacement & Upgrade	171	146	28.3%	06-Aug-18	10-Apr-19	06-Aug-18 A	21-May-19					
L-906	L-906, HFD Station 92 Expansion	142	123	0.4%	17-Sep-18	10-Apr-19	17-Sep-18 A	18-Apr-19					
S-245	S-245, Live Fire Shoot House	266	19	99.5%	21-Sep-17	10-Oct-18	21-Sep-17 A	15-Nov-18					

  

 Remaining Work  Baseline	<b>MSC - Reliability Projects</b> <b>Summary Schedule</b> <b>Data Date: 21-Oct-18</b>	
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## 9.0 BASELINE CHANGE REQUEST LOG (BCR)

Baseline Change Request Log for October 2018.

Seven Baseline Change Requests (BCRs) were processed in October.

Two BCRs incorporated Contract Modifications:

- VMSA-19-005 – Mod 745 – Incorporate 300 Area Water and Sewer Credit Proposal
- VPMTO-19-001 – Mod 741, Definitization of PMTO 19-001, Hanford Site-Wide Contractor Assurance System Implementation Support Phase III

Two BCRs related to Reliability Projects:

- VMSA-19-003 – Move Budget from Reliability Project Out-Year Planning Package to FY 2019 Spares Inventory Account
- RL0201MR-19-001 – Administrative BCR - Move RL-0201 Reliability Projects Management Reserve from FY 2018 to May 2019

Three BCRs were Administrative in Nature:

- VMSA-19-001 – Administrative BCR - Implementation of FY 2019 Base Year Shift, Blended Calendars and Blended Forward Pricing Rates
- VMSA-19-002 – Administrative BCR - Implementation of Functional Service Area (FSA) Organization Changes for PMB & Non-PMB Excluding Portfolio Management Realignment
- VMSA-19-004 – Administrative BCR - Create Lower Level Task Order (LLTO) WBSs for Cost Collection Established in the Month of October

Table 9-1. Consolidated Baseline Change Log

Consolidated Baseline Change Log											
§ in thousands											
						POST CONTRACT BUDGET					
PBS / Other	Reporting Baseline	Contract PMB	Contract PMB Mgmt Reserve	Contract Performance Budget (CPB)	Cum Contract Period	FY19 Budget	FY19 Management Reserve	Post Contract Budget	Post Contract Mgmt Reserve	Total Lifecycle	Cum Lifecycle Budget
	<b>Prior PMB Total</b>	<b>Sep 2018</b>	1,230,506		1,230,506	1,230,506	175,150		1,204,440	2,434,945	2,434,945
VMSA-19-001						0			0	0	2,434,945
VMSA-19-002						0			0	0	2,434,945
VMSA-19-003						0			0	0	2,434,945
VMSA-19-004						0			0	0	2,434,945
VMSA-19-005						0			0	0	2,434,945
	<b>Revised PMB Total</b>	<b>Oct 2018</b>	1,230,506		1,230,506	1,230,506	175,150		1,204,440	2,434,945	
	<b>Prior Non-PMB Total</b>	<b>Sep 2018</b>	604,007		604,007		63,413		518,327	1,122,335	1,122,335
VMSA-19-001						0			0	0	1,122,335
VMSA-19-002						0			0	0	1,122,335
VMSA-19-004						0			0	0	1,122,335
VMSA-19-005						1,175		1,175		1,175	1,123,510
VPMT0-19-001						261		261		261	1,123,770
	<b>Revised Non-PMB Total</b>	<b>Oct 2018</b>	604,007		604,007		64,849		519,763	1,123,770	
	<b>Total Contract Performance Baseline</b>	<b>Oct 2018</b>	1,834,513		1,834,513	1,834,513	239,999		1,724,203	3,558,715	
	<b>Management Reserve</b>	<b>Sep 2018</b>		0	0			0	4,551	4,551	4,551
VMSA-19-005								819	819	819	5,370
RL0201MR-19-001								4,551	0	0	5,370
	<b>Revised Management Reserve</b>	<b>Oct 2018</b>		0	0			5,370	5,370	5,370	
	<b>Total Contract Budget Base</b>	<b>Oct 2018</b>		1,834,513					1,729,573	3,564,085	
	<b>Prior Fee Total</b>	<b>Sep 2018</b>	109,961		109,961		14,404		100,736	210,696	210,696
VMSA-19-005						(99)		(99)		(99)	210,598
VPMT0-19-001						10		10		10	210,608
	<b>Revised Fee Total</b>	<b>Oct 2018</b>	109,961		109,961		14,316		100,648	210,608	
	<b>Change Log Total</b>	<b>Oct 2018</b>		1,944,473					1,830,220	3,774,694	



## 10.0 RISK MANAGEMENT

October risk management efforts, aiding in completing the overall MSA risk determination, included the following:

- The October Risk Management Board was postponed, and, due to resource availability, will be combined with the November Risk Management Board. As a result, the combined Risk Management Board will review the overall company risk posture associated with September and October data.
- Risk Reporting – In October, in accordance with the MSC-PLN-RIM-42375, *Hanford Mission Support Contract Risk Management Plan*, the monthly Risk Management report was submitted to the RL Contracting Office. The monthly Risk Management reports for both August data and September data were submitted this month.
- Mission Risk Management:
  - Mission Level Quantitative Risk Analyses – The Site Wide Services quantitative analysis for FY 2019 was initiated.
  - Mission Risk Elicitation: Risk Management held a risk elicitation with Information Management – Document Control & Records Support. A draft risk is in development.
  - Mission Risk Review/Updates: Risk register reviews were held with Emergency Services (ES), Environmental, Safety & Health (ES&H), Training and Conduct of Operations (T&CO), Public Works (PW) – Fleet, and Site Services & Interface Management (SS&IM).
  - Operations Change Control Board (OCCB) Packet Review: The OCCB packet was reviewed and assessed for risks for new work scope.
- Project Risk Management:
  - Project Risk Review – A monthly risk review was performed with the Project Manager to review and revise the HSPD-12 risk register. Updates to this risk register were captured as appropriate.
  - Reliability Project Risk Review and Updates: A monthly risk review was performed with the Project Managers to review and revise the Reliability Project risk registers for all active projects. Updates to these risk registers were captured as appropriate.



- Risk Management staff reviewed the monthly Operations Project Reports for each Reliability Project, and any related Key Risks for monthly reporting to RL.
- Other Support:
  - The Risk Management Procedure, MSC-PRO-RIM-61816, *Risk Analysis, Processing, and Reporting*, was reviewed and revised to be consistent with the recent updates to MSC-PLN-RIM-42375, *Hanford Mission Support Contract Risk Management Plan*.
  - Change Proposal Support: Performed Sensitivity Analysis for the 10 CFR 851 Workers Safety and Health Proposal.
  - Operating Excellence Support: Risk Management participated in the Business Management System Upgrades for Risk Management structured improvement activity. Additional activities included:
    - Pre-work initiated for the Reliability Project and Risk Management Integration Kaizen event. This structured improvement activity is being performed to resolve an Opportunity for Improvement (OFI) Issues Identification Form (IIF) item.



## 11.0 DASHBOARD SUMMARY

Table 11-1. Performance Evaluation and Measurement Plan

		October FY 2019 Fiscal Year 2019 PEMP, Mod 737		Status	
		Deliverables		YTD	Oct
<b>1.0 Effective Site Cleanup - Achievement of cleanup contractors' key milestones and regulatory commitments</b>					
1.1	Demonstrate that the following performance measure targets were met.				
	a	Biological Controls – Pest Removal			
	b	Biological Controls – Tumbleweed Removal			
	c	Biological Controls – Vegetation			
	d	Contractor Assurance System - Assessments			
	e	Contractor Assurance System - Causal Analysis			
	f	Contractor Assurance - Issue Resolved			
	g	Crane and Crew Support			
	h	Facilities Maintenance			
	i	Fire Systems - Inspection, Testing and Maintenance			
	j	Fire Systems - Priority 1 Emergency Impairments			
	k	Fire Systems - Priority 2 Emergency Impairments			
	l	Fire Systems - Priority 3 Emergency Impairments			
	m	Fleet Services – Heavy Equipment (Cranes)			
	n	Fleet Services – Heavy Equipment (Evacuators)			
	o	Fleet Services – Heavy Equipment (General Purpose)			
	p	Fleet Services – Light Equipment (Hanford Patrol)			
	q	Fleet Services – Light Equipment (Hanford Fire)			
r	Fleet Services – Light Equipment (Special Purpose Trucks)				
s	IT - Cyber Security – System Patching				
t	RSS - Dosimetry External Services				
u	RSS - Instrument Calibration				
1.2	Demonstrate effective management of electric, water and sewer utilities to maximize reliability and redundancy				
	Water	Maintain Raw Water Pressure at ICD Level			
		Maintain Potable Water Pressure at ICD Level			
		Perform Preventative maintenance at 90% or better each month			
		Maintain backlog corrective maintenance average age of open work packages to 300 days or less			
		Ensure all water quality samples are completed on time			
	Sewer	Quarterly System Health Report by Engineering submitted one calendar month after each quarter			
		Perform Preventative maintenance at 90% or better each month			
		Maintain backlog corrective maintenance average age of open work packages to 300 days or less			
	Electric	Quarterly System Health Report by Engineering submitted one calendar month after each quarter			
		Electrical power availability			
		Perform Preventative maintenance at 90% or better each month			
Reduce corrective maintenance backlog identified as of October 1, 2018 by 20% no later than May 1, 2019					
	Quarterly System Health Report by Engineering submitted one calendar month after each quarter				

**LEGEND**

= On Schedule

= Objective missed

= N/A = Not Applicable (Updated quarterly)

= Complete

= In jeopardy



Table 11-1, cont. Performance Evaluation and Measurement Plan.

		October FY 2019		Status	
		Fiscal Year 2019 PEMP, Mod 737		YTD	Oct
		Deliverables			
<b>1.0 Effective Site Cleanup - Achievement of cleanup contractors' key milestones and regulatory commitments</b>					
1.3		Demonstrate effective development and management of reliability projects that assure mission milestones and regulatory commitments are met		Green	Green
	a	L-894, Raw Water Cross Connections - Complete construction of the cross tie line.		Green	Green
	b	L-897, Central Plateau Water Treatment Facility (DFLAW Essential) - Complete 90% of design.		Green	Green
	c	L-850, Replace 200W 1.1M-gal PW tank (DFLAW Essential) - Complete 100% of design.		Yellow	Green
	d	L-791, RFL Transfer Trip - Complete design and installation of fiber optic cable from fox box 6FX2 on Pole E2476 to the A6 substation		Green	Green
<b>2.0 Efficient Site Cleanup - Align resources and capabilities to support the site cleanup mission</b>					
2.1		Maximize efficient MSA use of resources to meet the other Hanford contractors' changing project needs.		Green	Green
2.2		Demonstrate effective Hanford Site integration to include, but not limited to, identifying longstanding or emerging issues that affect efficient site operations and provide recommendations for improvement.		Green	Green
	a	Through the CLC and CIB processes, provide DOE-RL with an unfiltered, forward looking view of emerging operational, budget, regulatory, or contractual issues.		Green	Green
	b	Conduct Operational Excellence Events: 40% of MSA's FY19 Operational Excellence events will be focused on crosscutting		Green	Green
	c	Full implementation of the MSA Assurance system to cover Operations, Financial, Maintenance, Work Management, Emergency Management, Safety and Environmental.		Green	Green
	d	Conduct monthly performance reviews using the Mission Assurance System demonstrating achievement of MSA's service		Green	Green
	e	Prepare Transition Plan for contract turnover,		Green	Green
	f	Prepare Closeout Plan for MSC closeout. Support activities associated with Contract Closeout (subcontracts, incurred cost submissions/audits, accounting reconciliations, etc.).		Green	Green

**LEGEND**

= On Schedule

= Objective missed

= Not Applicable (Updated quarterly)

= Complete

= In jeopardy

1.3.c – Yellow for October, Green overall. For Project L-850: The contractor’s 60% design package submittal was rejected as incomplete. Meetings have been conducted with the contractor to assess corrective actions for resubmittal of the 60% submittal, as well as future 90% design package; now monitoring status.



Table 11-1, cont. Performance Evaluation and Measurement Plan.

October FY 2019 Fiscal Year 2019 PEMP, Mod 737		Status	
Deliverables		YTD	Oct
<b>3.0 Comprehensive Performance</b>			
Execute the balance of contract work scope within the contract requirements, terms, and conditions, demonstrating excellence in quality, schedule, management, cost control, small business utilization, and regulatory compliance.			
Provide leadership to improve management effectiveness and collaborate and participate proactively with customers.			
Work with DOE and the other Hanford contractors in a spirit of cooperation to demonstrate operational excellence to include, but not limited to, the following areas:			
	Business and financial management using approved purchasing, estimating, property, budget, planning, billing, labor, accounting, and performance measurement systems, providing visibility and transparency to DOE with respect to each of the forgoing		
	Contract change management and subcontract administration and consent activities, e.g., proposal review and negotiation process, including timely and adequate submission of proposals and requests for additional data, timely counteroffers, and attaining small business goals		
	Safeguards and security, fire department operations, emergency response, and emergency operations/emergency		
	Land Management		
	Infrastructure and services program management, operations and maintenance		
	Effective contractor human resources management		
	Problem identification and corrective action implementation		
Performed work safely and in a compliant manner that assures the workers, public, and environment are protected from adverse consequences			

**LEGEND**

= On Schedule

= Objective missed

N/A = Not Applicable (Updated quarterly)

= Complete

= In jeopardy

## 12.0 CONTRACT DELIVERABLES STATUS

The following itemizes the contract deliverables due to RL in October, and provides a look ahead through November 2018.

Table 12-1. October 2018 – November 2018 Contract Deliverables

CDRL	Deliverable	Responsible	Date Due	Date Submitted to DOE	Action	Response Time	Date Due from DOE	Date Approved by DOE
CD0123	Monthly Billing Reports for DOE Services - Sep	Eckman	10/05/18	09/27/18	Information	N/A	N/A	N/A
CD0124	Quarterly Service Level Report	Eckman	10/10/18	10/10/18	Information	N/A	N/A	N/A
CD0144	Monthly Performance Report - Aug	Olsen	10/10/18	10/10/18	Review	None	N/A	N/A
CD0041	Emergency Readiness Assurance Plan (ERAP)	Walton	10/15/18	10/15/18	Approve	45 days	11/22/18	N/A
CD0178	Quarterly Manpower Reports and Budget Forecasts	Walton	10/16/18	10/08/18	N/A	N/A	N/A	N/A
CD0023a	National Security System (NSS) - Quarterly Status Report	Walton	10/23/18	10/09/18	Review	N/A	N/A	N/A
CD0026	Site Safeguards and Security Plan (SSSP)	Walton	10/15/18	10/08/18	Approve	45 days	02/05/19	N/A
CD0161	Worker Safety and Helath Program	Wilson	10/17/18	10/17/18	Approve	90 days		N/A
CD0008	Force-On-Force Test Results	Walton	10/26/18	10/22/18	Review	45 days	N/A	N/A
CD0084	Bonneville Power Administration (BPA) Power and Transmission Service invoice verification and breakdown of site contractor costs - Aug	Synoground	10/30/18	10/30/18	Review	30 days	N/A	N/A
CD0051	Milestone Review and IAMIT Meeting Minutes - Sep	Wilson	10/30/18		Information	N/A	N/A	N/A
CD0010	Patrol Security Incident Response Plan (SIRP)	Walton	10/31/18	10/11/18	Approve	45 days	11/25/18	11/07/18
CD0017a	Human Reliability Program Management Plan	Walton	10/31/18	10/16/18	Review	N/A	N/A	N/A
CD0018a	Workplace Substance Abuse Program Management Plan	Walton	10/31/18	10/17/18	Review	N/A	N/A	N/A
CD0106	List of Facilities to be or that have been CAS Inspected, or no longer meet the Useful Life Inspection Criteria	Synoground	10/31/18	10/11/18	Information	N/A	N/A	N/A
CD0112	Inventory Accuracy Reports	Olsen	11/01/18	10/23/18	Information	N/A	N/A	N/A
CD0113	Inventory Accuracy Reports	Olsen	11/01/18	10/23/18	Information	N/A	N/A	N/A
CD0114	Disposal of Excess and Surplus Personal Property Report	Olsen	11/01/18	10/23/18	Information	N/A	N/A	N/A
CD0123	Monthly Billing Reports for DOE Services - Oct	Eckman	11/05/18	11/05/18	Information	N/A	N/A	N/A
CD0051	Milestone Review and IAMIT Meeting Minutes - Oct	Wilson	11/05/18		Information	N/A	N/A	N/A
CD0144	Monthly Performance Report - Sep	Olsen	11/10/18	11/07/18	Review	None	N/A	N/A
CD0046	Self-Assessment and Corrective Actions	Walton	11/15/18		Review	30 days	N/A	N/A
CD0182	Site-Wide Assessment of Institutional Controls	Synoground	11/15/18	10/30/18	N/A	N/A	N/A	N/A
CD0084	Bonneville Power Administration (BPA) Power and Transmission Service invoice verification and breakdown of site contractor costs - Sep	Synoground	11/30/18		Review	30 days	N/A	N/A

NOTE: Areas shaded in gray indicate delivery to DOE, and when the "Date Approved by DOE" is shaded, approval has been received in return.

"Review" responses from DOE are not documented with dates, but shaded when complete.

IAMIT = Interagency Management Integration Team.

TPA = Tri-Party Agreement.

N/A = No action.



## 12.1 GOVERNMENT-FURNISHED SERVICES/INFORMATION AND DOE DECISIONS

There were two Government-Furnished Services and Information (GFS/I) items due to MSA in 2018:

- GF049, due June 1, 2018: DOE to provide a Hanford “planning case” budget to prepare the updated *Hanford Lifecycle Scope, Schedule, and Cost Report*, and
- GF050, due October 31, 2018: DOE Approval of the *DRAFT Hanford Lifecycle Scope, Schedule, and Cost Report* (Lifecycle Report).

Item GF049 is complete. As of this writing, Item GF050 has not yet been finalized, but MSA is working with RL, and final direction from the RL Contracting Officer is anticipated in the near future.



## 13.0 SELF-PERFORMED WORK

Table 13-1. Mission Support Contract Socioeconomic Reporting.

Plan Category	MSA Goal	FY 2019 Actual To-Date	Cumulative %
Small Business	50.0%	67.6%	60.5%
Small Disadvantaged Business	10.0%	12.1%	17.6%
Small Women-Owned Business	6.8%	19.0%	13.4%
HubZone	2.7%	3.1%	5.5%
Small Disadvantaged, Service Disabled	2.0%	1.6%	6.2%
Veteran-Owned Small Business	2.0%	1.7%	7.3%
Local Small Business	Highest Preference	36.6%	-

Through October 2018

### Prime Contract Targets:

- At least 40% contracted out beyond MSA, LLC = 45% (\$1.701B/\$3.770B)
- Small Business 25% of Total Mission Support Contract (MSC) Value = 27% (\$1.029B/\$3.770B)