

# MISSION SUPPORT ALLIANCE

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



# Monthly Performance Report November 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
BIO	Business Integration & 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
ESH&Q	Environment, Safety, Health, and Quality
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 November 2018.

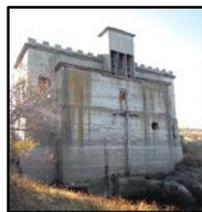
### 1.1 KEY ACCOMPLISHMENTS

**Fire Safety Maintenance Inspection, Testing & Maintenance Program** – Hanford Fire Department (HFD) Fire Safety Maintenance Inspection, Testing and Maintenance program issued Requirements Document, MSC-RD-FP-7899, *Fire Protection System Testing/Inspection/Maintenance/Deficiencies*, in November. The Fire Marshal’s office worked with all Hanford contractors and RL to gain their input, anticipate any programmatic impacts and ensure the procedure aligns with the National Fire Protection Associations (NFPA) codes and standards.

**Site Condition Monitoring Completed** – MSA Environmental Integration Services (EIS) staff conducted Section 110 Site Condition Monitoring of five sites: Allard Pump House, Bruggemann’s Warehouse, Hanford High School, Hanford Substation, and White Bluffs Bank. Monitoring included the inspection of buildings and their surrounding areas. With the exception of the White Bluffs Bank, which was last monitored in 2009, the remaining buildings were all last monitored in 2004. Rehabilitation of the White Bluffs Bank was recently completed; the remaining buildings are in similar condition to what was reported in 2004. Limited impacts to the areas surrounding the historic buildings were noted. See photos below.



*Overview of the Hanford Substation with swallow nests on north side.*



*Back of Allard Pumphouse with bird nesting at top and break in metal piping.*



*Continued degradation of metal façade and concrete structure on east side of Hanford High School*



**Vehicle Safety Assessment** – During November, MSA led a multi-contractor team to investigate and evaluate error-likely situations by identifying potential obstacles that could be struck by personnel driving vehicles on the Hanford Site. The assessment’s focus was on curbing, fences, bollards, guy wires, jersey barriers, signs, and/or any other items that may have the potential to be struck by a motorized vehicle. The assessment team identified 198 jersey barriers, 914 bollards, 93 guy wires, 174 signage issues, 47 parking issues and 1,467 miscellaneous items that will be evaluated by the responsible facility owners.

**Hanford Site Lockout/Tagout Procedure, Revision 3** – The Lockout/Tagout (LOTO) Committee completed their revision to DOE-0336, *Hanford Site Lockout/Tagout*, and obtained contractor approval signatures. The standard will be considered approved unless RL otherwise notifies MSA. The committee worked with Volpentest HAMMER Federal Training Center (HAMMER) personnel to develop and implement an innovative approach to providing the gap training to LOTO qualified workers, supervisors, and planners, and began training in November.

**FY 2019 Integrated Infrastructure Portfolio (IIP) Guidance** – On November 20, 2018, MSA received the Contract/Baseline Alignment Guidance (CBAG) Rev. 2 from RL. This revision included a significant increase to Infrastructure Reliability Projects and other minor increases associated with Safeguards and Security, HAMMER, and B-Reactor. During the months of December 2018, and January 2019, MSA Program Controls will incorporate the revised funding guidance. Planned submittal of the updated Fiscal Year (FY) 2019 IIP and associated documents is by January 23, 2019.

**Business Management System (BMS) Upgrade** – The BMS Upgrade project continued its integration and coordination with Hanford contractors through focused requirement definition reviews that will be used to establish software options. Vendor demonstrations will take place in January with various Hanford contractors. Information gathered from the demonstrations, as well as a down select recommendation, will be documented in a BMS Replacement Study. This supports the overall project objective to establish and implement a site standardized BMS/Enterprise Resource Planning solution that consolidates the current infrastructure footprint.

**Ecological Compliance Review Database Deployed** – MSA Information Systems (IS) staff developed and deployed the initial 1.0 version of the Ecological Compliance Review Database application (ECRD) to assist the MSA Ecological Monitoring and Compliance organization in tracking performed ecological compliance reviews. (These reviews are performed on Hanford work locations that may be ecologically sensitive,



and provide the necessary ecological clearance for Hanford work activities.) The ECRD application captures and stores review project information, maps, field survey notes, re-vegetation information and assists staff in generating compliance review letters. Prior to this development, there has not been a single system at Hanford for all ecological compliance review-related information in one place, and in one system.

**Records Backlog Project Complete** – In November, MSA Imaging Operations (IO) team members processing records for Washington River Protection Solutions LLC (WRPS) completed a backlog project in support of the 222-S Labs. This project consisted of adding categories and metadata to more than 4,000 Laboratory Change Board (LCB) Request for Service records that had been partially added to the Integrated Document Management System (IDMS), but never completed. The IO team will be adding the categories and metadata for WRPS as new work scope goes forward.

**New Service Request Process Implemented** – During the month of November, the IM Enterprise Service Platform (ESP) team implemented MSA Information Technology (IT) Engineering and Infrastructure service requests into production. This system of forms, screens, and workflows automates the work for the IT Infrastructure work planners, and the IT Engineering and Infrastructure teams, to get work efficiently authorized and assigned in alignment with business processes. The updated service requests provide better functionality to the IT Infrastructure and Engineering teams, and visibility to the end user/requestor in ESP.

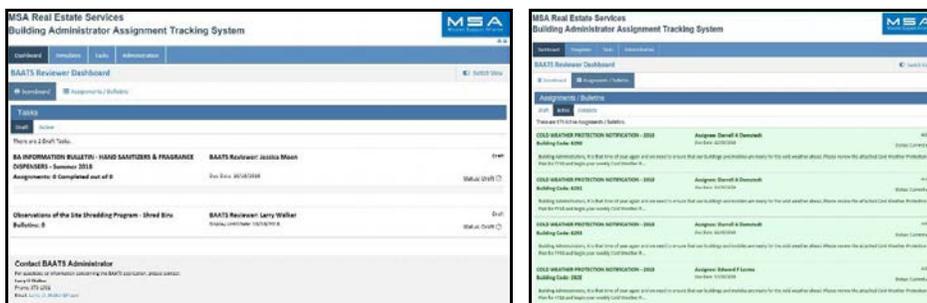
**Data Center Relocation** – MSA is continuing efforts to relocate the 339A Data Center equipment and servers to its new location in Building 1220. Actions are in progress to review proposals for HVAC work at the facility, and complete work packages to 1) move the synchronous optical network equipment and four uplink circuits from 339A to 1220; 2) relocate the paging system; and 3) remove the 5ESS legacy telephone switch and install power and racks in 1220.

**Contractor Assurance Support** – During November, MSA continued to provide subject matter expertise to RL by providing support for the following areas:

- Performed User Acceptance Testing of Action Request and Corrective Action module.
- Closed tracking system items for all modules related to User Acceptance Testing.
- Revised observation mobile application approach.
- Completed User Acceptance Testing of Action Request and Corrective Action module.

- Revised Performance Work Statements for new Hanford prime contracts (Office of Hanford Acquisition).
- Completed User Acceptance Testing Test Plan and Test Case documentation for RL and DOE Office of River Protection (ORP) approval.
- Participated in DOE-RL EM-QA-001 Revision 2 (Draft) comment session.
- Revised Integrated Oversight and Integrated Issues Management procedures to align with workflow configuration and to remove Nuclear Quality Assurance-1 (NQA-1) requirements.
- Reviewed Integrated Oversight and Integrated Issues Management procedures for inclusion in DOE Procedure Management System.
- Attended the Requirements Management Process Improvement Kaizen kick-off meeting.
- Reviewed the Integrated Contractor Assurance System (iCAS) workflow for user interface issues.

**Real Estate Services Building Administrator Assignment Tracking System (RES-BAATS) Deployment** – The initial version of the Real Estate Services Building Administrator Assignment Tracking System (RES-BAATS) was developed and deployed on November 6, 2018. This new application gives the MSA Lead Building Administrators a web-based custom tool to assign and track actions to respective Building Managers/Administrators such as cold weather building preparations, performing fire extinguisher inventory, and posting new safety posters on building bulletin boards, etc. In addition, the application will provide the Building Administrator assignee access to a web-based dashboard tool to review/respond to assignments, and to provide status on assignments or compliance. This new tool replaces the effort of manually sending mass emails to communicate assignments/tasks and gather performance metrics.



*New application assigns/tracks actions to Building Managers*

**11-Mile Footprint Reduction Pole Removal** – With the conclusion of the 2018 fire season, MSA Electrical Utilities (EU) staff were able to resume work on the 100 Area 11-mile footprint reduction pole removal project. In 2017, EU workers removed the distribution equipment and aerial lines, but not the poles. Due to the location between 100H and the Hanford town site, EU linemen received training on ecological cultural sensitivity before work began. Pole removal resumed with 40 of the total 356 poles radiologically released for offsite disposal. Poles that are not releasable are taken to Hanford’s Environmental Restoration Disposal Facility (ERDF) for disposal.



*Electrical poles removed and transported to ERDF*

**Transport of Mixed Waste** – On November 19, 2018, EU staff sent three 110-gallon drums of mixed waste to the ERDF for burial. These drums originated from the annual filter change-outs of the Motor Carrier Services’ vacuum truck (also known as the “Guzzler”). The State of Washington, Department of Ecology classifies mixed waste as potentially dangerous to the environment, and therefore regulates these temporary storage facilities in order to minimize impacts before final disposal is determined.



*Mixed waste transported to ERDF*

**Restoring Heat to Fire Station 93** – On November 8, 2018, Refrigeration Equipment Services (RES) staff worked overtime to resolve a heating issue at the Hanford Fire Department (HFD) Station 93. As the firefighter living and sleeping quarters had been without heat for several days, station personnel had deployed the use of portable heating units in an attempt to lessen the impact of overnight temperatures forecasted to

be in the 20s. However, these heating units had proven to be ineffective and were creating a safety concern. The RES crew was able to replace the pumps and restore heating to the facility.

**Priest Rapids Road Spill Cleanup Near Midway Substation** – During the summer months, MSA road crews began repairs on the road that leads to the Bonneville Power Administration (BPA) Midway Substation. During this work, crews discovered what appeared to be a petroleum spill located near the first gate entrance to the BPA Substation. MSA completed cleanup of the spill on November 15, 2018, removing approximately thirty tons of soil from the affected area, and placing the material in two Environmental Restoration Disposal Facility (ERDF) containers for disposal. The containers are slated to be shipped to ERDF in early December.



*Cleanup effort to remove contaminated soil*

**FY 2019 Infrastructure and Services Alignment Plan (ISAP) Kickoff Meeting** – Preparations for the FY 2019 Infrastructure and Services Alignment Plan (ISAP) began with a kickoff meeting for staff members from MSA Electrical Utilities, Water & Sewer Utilities, Roads, and Fleet Services on November 27, 2018. Representatives from the RL Infrastructure & Services Division (ISD), MSA Public Works, and MSA Site Services and Interface Management organizations were in attendance.

**Tri-Cities Fire Academy Live Fire Training** – HAMMER personnel supported the Tri-Cities Fire Academy as it conducted live fire training for recruits on November 8, 2018. The training utilized HAMMER’s Flammable Liquids Pad, Dumpster Pad, and Vehicle Burn prop. The academy is comprised of fire fighters from the Kennewick, Pasco, and Richland, Washington Fire Departments.

**Alaskan Earthquake Response Efforts** – The HAMMER Energy Response team provided quick response to a 7.0 magnitude earthquake that struck north of Anchorage, Alaska on November 30, 2018. The earthquake caused power outages and damage to roads and buildings. An Emergency Support Function #12 responder was deployed to



the Federal Emergency Management Agency (FEMA) Region 10 Emergency Response Center in Bothell, Washington, where he assisted in the successful effort of restoring power within 24-hours.

***What's Happening@ HanfordSite Newsletter*** – MSA distributed the first edition of the *What's Happening @HanfordSite* newsletter to a subscription list of approximately 10,000. The list includes elected officials, Hanford workers, stakeholders and members of the public. More than 60 percent of the people opened the email upon receipt, and approximately 2,000 people clicked on an article within the newsletter.

**November Aerial Photography** – Aerial photography over Hanford requires significant coordination, including scheduling with the photographer and airline; contacting teams from DOE, Bechtel, CHPRC, MSA, WRPS, and the Pacific Northwest National Laboratory (PNNL) for their list of requested photographs, and delivering the final photos. In November, MSA coordinated aerial photos that gathered images from Trench 94, the Plutonium Finishing Plant, MSA's waterline project, the Central Waste Complex, and the PUREX Tunnels.

**Successful Memorandum of Agreement Negotiations** – On November 19, 2018, Human Resources staff successfully completed negotiating a Memorandum of Agreement with the Teamsters Local 893 and Hanford Atomic Metal Trades Council that allows for a mission-based Supervisory Work Group (SWG) for the Heavy Truck Driver classification. This agreement is in contrast to the traditional geographically-based SWG. The new agreement will allow MSA and its customer, CH2M HILL Plateau Remediation Company (CHPRC), greater flexibility in assigning Heavy Truck Drivers to a variety of work locations to support emergent and itinerant work scope.

**Breakfast of Champions** – On Thursday, November 15, 2018, MSA hosted the 10<sup>th</sup> Breakfast of Champions recognition event, which honored 37 employees for outstanding achievements that demonstrate MSA's commitment to company values and the customers we serve.



## 1.2 LOOK AHEAD

**Regulatory Agency Inspection Participant Training** – MSA Environmental Integration Services (EIS) staff has initiated development of a computer-based training module to assist workers that attend and support Site regulatory agency inspections. EIS and MSA Technical Training are working together on the training to relay DOE and Hanford Contractors policies, protocols, and expectations to workers that, or have the potential to, support regulatory agency inspections. The training will also provide interaction advice and steps to follow, and will include relatable animated scenarios to inform and remind workers of their responsibility to accommodate and comply.

**Proposed Fleet Management Complex** – EIS personnel met with MSA Fleet Services, MSA Project Services, and RL Infrastructure and Services Division staff to begin integration of project planning and National Environmental Protection Act (NEPA) reviews for projects that will design, construct, and operate a new Fleet Management complex in 200-East Area. Given the previously disturbed and developed nature of the alternative construction sites and their location in the industrial-exclusive portion of the Hanford Site, it is anticipated that an Activity-Specific Categorical Exclusion NEPA Review Screening Form (NRSF) can be submitted to the DOE NEPA compliance officer for approval. Cultural, ecological, and other resource reviews will be performed to support completion of the NRSF.

**Deer and Elk Salvage Meeting with DOE** – EIS and RL representatives met on the issue of the public and employees salvaging deer and elk from Hanford roadways. MSA will draft a proposal for dealing with road strikes and their ultimate disposition. The agreed premise would be to maintain all animals within the DOE-managed property, and that they remain on that property.

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	\$87,896.6	\$17,840.7	\$12,090.3	\$5,750.4
RL-0040	Reliability Projects/HAMMER/ Inventory	\$3,672.0	\$3,672.0	\$1,094.5	\$2,577.5
RL-0201	Hanford Site-Wide Services	\$72,709.0	\$15,544.0	\$4,784.6	\$10,759.4
RL-0041	B Reactor	\$3,298.5	\$3,298.5	\$-	\$3,298.5
SWS	Site-Wide Services	\$213,139.1	\$51,826.4	\$30,596.3	\$21,230.1
<b>Total</b>		<b>\$380,916.4</b>	<b>\$92,382.8</b>	<b>\$48,565.7</b>	<b>\$43,817.1</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 2

\*\* Funds received through Contract Modification 757, dated December 12, 2018

Based upon FY19 actuals the remaining uncosted carryover balance will fund SWS through January 7, 2019 and RL-20 through December 19, 2018.



## 3.0 SAFETY PERFORMANCE

During the month of November, MSA did not experience any injuries that classified as “Recordable”. As a result, both the fiscal year 2019 Total Recordable Case (TRC) and Days Away, Restricted or Transferred (DART) rates are at 0.30 and below the DOE performance measurement baseline of 1.1 and 0.60, respectively. Seven First Aid cases were recorded, which is average for a given month.

As the holiday season approaches, distracted working and the potential for increased workplace hazards has been a topic of focus. The last module of the Safety Inspection Campaign was distributed, and discussions on hazard recognition of common hazards have been occurring at various employee meetings. Great emphasis continues to be placed on vehicle safety, specifically on elk strikes and winter driving.



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**

	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
Monthly Recordable Cases	1	0	0	1	2	1	1	1	0	1	1	0
Monthly TRC Rate	0.60	0.00	0.00	0.43	1.17	0.53	0.61	0.62	0.00	0.49	0.65	0.00
Performance (3-m Average)	0.60	0.40	0.20	0.18	0.52	0.68	0.76	0.58	0.36	0.33	0.34	0.37
Performance (12-m Average)	0.66	0.66	0.60	0.60	0.65	0.64	0.65	0.65	0.54	0.46	0.46	0.41

**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:	12/7/2018

**FY19 = 0.30 CY18 = 0.40**

**Total Recordable Case (TRC) Rate**

**Analysis**

During the month of November there were no injuries classified as Recordable.

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 Personal Protective Equipment (PPE), and awareness communications in preparation for cold weather and other seasonal changes
- Issued Weekly Safety Starts which focused on responding to site closures and delays, barricade safety, and recycling opportunities at Hanford.
- Delivered the last inspection module 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. Employees are expected to perform an inspection of their work environment utilizing the tools they learned from the safety inspection modules and work group discussions.

**Additional Info**

None

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

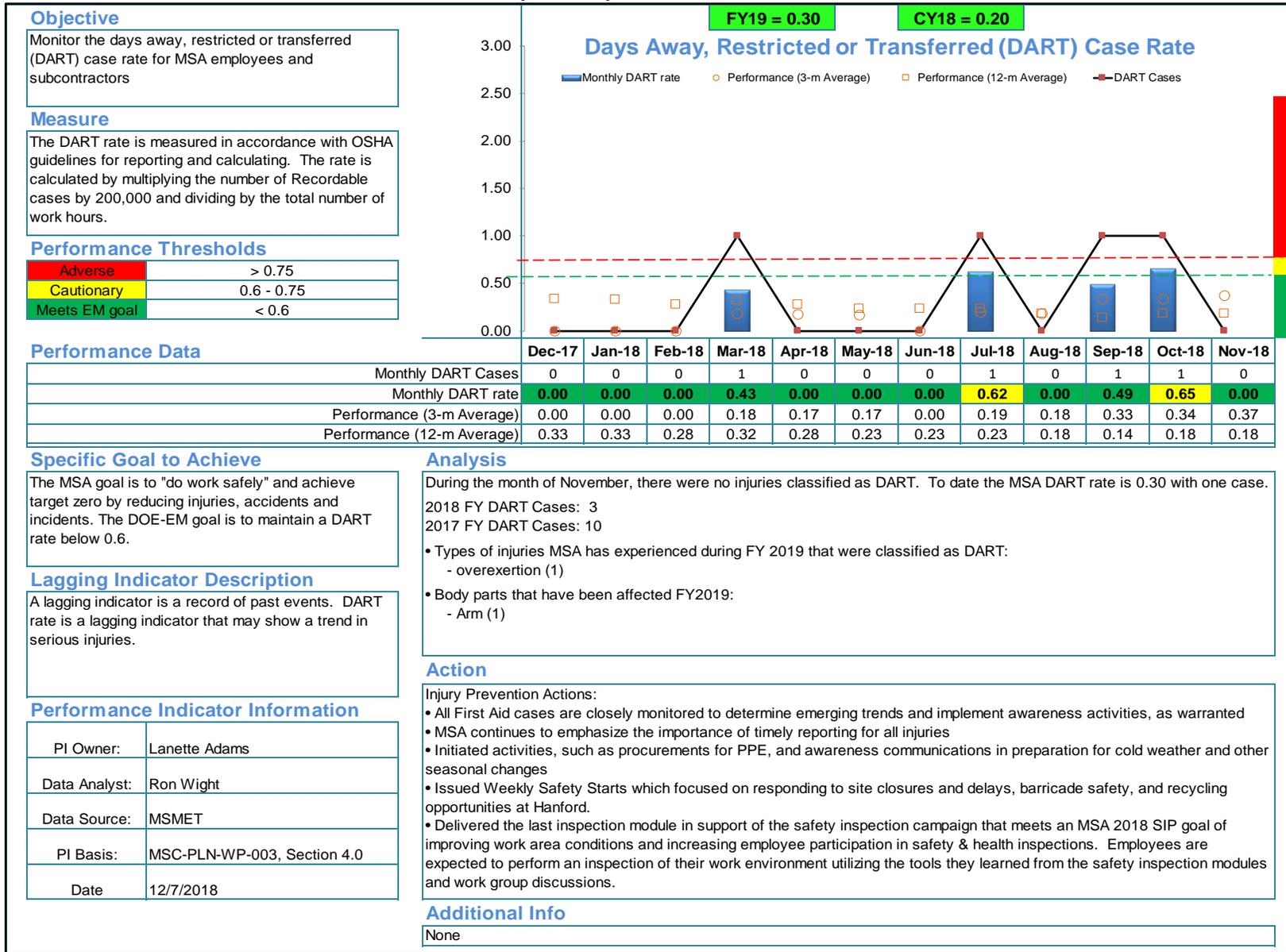




Table 3-3. First-Aid Case Rate

**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

FY19 = 4.78      CY18 = 4.12

**First Aid**

	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
First Aid Cases	8	9	9	7	6	9	4	11	6	6	9	7
Monthly First Aid Rate	4.78	6.19	5.12	3.03	3.50	4.74	2.44	6.79	2.56	2.92	5.82	3.89
Performance (3 month Average)	6.95	5.36	5.32	4.53	3.80	3.71	3.62	4.65	3.75	3.82	3.53	4.07
Performance (12 month Average)	5.68	5.77	5.62	5.57	5.49	5.44	5.04	5.18	4.82	4.67	4.29	4.17

**Performance Data**

	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
First Aid Cases	8	9	9	7	6	9	4	11	6	6	9	7
Monthly First Aid Rate	4.78	6.19	5.12	3.03	3.50	4.74	2.44	6.79	2.56	2.92	5.82	3.89
Performance (3 month Average)	6.95	5.36	5.32	4.53	3.80	3.71	3.62	4.65	3.75	3.82	3.53	4.07
Performance (12 month Average)	5.68	5.77	5.62	5.57	5.49	5.44	5.04	5.18	4.82	4.67	4.29	4.17

**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.

**Analysis**

MSA experienced 7 First Aid cases in November. The injuries were caused by the following incidents: body motion (2); struck by (2); slip/trip/fall (1); and, overexertion (2).

Year to date, it appears that body motion has contributed to a majority of the injuries.

- 31% by body motion, 19% by overexertion, 19% from being struck by, 12% from being struck against, 12% contact with (rub, abrade), and 6% by a slip/trip/fall.
- 50% arm/hand, 38% leg/foot, 6% chest, and 6% back.

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

**Performance Indicator Information**

PI Owner:	Lanette Adams
Data Analyst:	Ron Wight
Data Source:	MSMET
PI Basis:	MSC-PLN-WP-003 Sect. 4.0
Date	12/7/2018

**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 responding to site closures and delays, barricade safety, and recycling opportunities at Hanford.
- Delivered the last inspection module 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. Employees are expected to perform an inspection of their work environment utilizing the tools they learned from the safety inspection modules and work group discussions.



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													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 (2018/10/22)								
b. Location (Address and Zip Code) Richland, WA 99352			b. Number RL14728			b. Phase Operations			b. To (2018/11/25)								
c. TYPE CPAF			d. Share Ratio			c. EVMS ACCEPTANCE No X Yes											
5. CONTRACT DATA																	
a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS									
N/A	\$3,596,353	\$0	\$210,609	\$3,806,962	\$4,007,711	N/A	N/A	N/A									
6. ESTIMATED COST AT COMPLETION						7. AUTHORIZED CONTRACTOR REPRESENTATIVE											
			CONTRACT BUDGET BASE (2)	VARIANCE (3)		a. NAME (Last, First, Middle Initial) Wilkinson, Robert E			b. TITLE MSC Project Manager								
a. BEST CASE			\$3,596,354			c. SIGNATURE 			d. DATE SIGNED 12/19/19								
b. WORST CASE			\$3,986,958														
c. MOST LIKELY			\$3,797,102	3,596,353	(200,749)												
8. PERFORMANCE DATA																	
Item (1)	Current Period						Cumulative to Date					At Completion					
	Budgeted Cost		Actual Cost Work Performed (4)	Variance		Budgeted Cost		Actual Cost Work Performed (9)	Variance		Budgeted (12)	Estimated (13)	Variance (14)				
	Work Scheduled (2)	Work Performed (3)		Schedule (5)	Cost (6)	Work Scheduled (7)	Work Performed (8)		Schedule (10)	Cost (11)							
a. WORK BREAKDOWN STRUCTURE ELEMENT																	
3001.01.01 - Safeguards and Security	13,378	13,378	6,265	0	7,113	546,362	546,362	553,124	0	(6,762)	574,623	589,812	(15,189)				
3001.01.02 - Fire and Emergency Response	5,106	5,106	3,282	0	1,823	203,140	203,140	235,299	0	(32,158)	213,184	254,638	(41,454)				
3001.01.03 - Emergency Management	1,342	1,342	373	0	969	45,514	45,514	41,609	0	3,905	48,561	43,866	4,695				
3001.01.04 - HAMMER	1,000	1,000	619	0	380	59,024	59,024	67,388	0	(8,364)	60,552	71,915	(11,363)				
3001.01.05 - Emergency Services Management	270	270	131	0	139	13,916	13,916	14,194	0	(278)	14,520	15,645	(1,125)				
3001.02.01 - Site-Wide Safety Standards	90	90	118	0	(28)	6,645	6,645	8,395	0	(1,750)	6,835	9,074	(2,240)				
3001.02.02 - Environmental Integration	1,166	1,166	413	0	754	53,206	53,206	52,541	0	665	55,617	55,009	608				
3001.02.03 - Public Safety & Resource Protection	1,549	1,549	970	0	579	67,056	67,056	65,950	0	1,106	72,282	71,643	639				
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	86	86	0	0	86	52,399	52,399	50,457	0	1,942	52,864	50,457	2,407				
3001.03.01 - IM Project Planning & Controls	590	590	125	0	466	34,660	34,660	31,598	0	3,062	35,952	32,174	3,778				
3001.03.02 - Information Systems	3,020	3,020	924	0	2,096	123,636	123,636	112,291	0	11,345	131,239	118,508	12,731				
3001.03.03 - Infrastructure / Cyber Security	668	668	566	0	102	36,106	36,106	39,190	0	(3,084)	37,557	42,682	(5,125)				
3001.03.04 - Content & Records Management	989	989	504	0	486	67,080	67,080	64,007	0	3,073	70,906	66,927	3,980				
3001.03.05 - IR/CM Management	290	290	145	0	146	12,330	12,330	12,370	0	(40)	12,934	13,169	(236)				
3001.03.06 - Information Support Services	457	457	154	0	303	14,637	14,637	13,218	0	1,419	15,706	14,116	1,590				
3001.04.01 - Roads and Grounds Services	707	707	255	0	451	26,264	26,264	27,992	0	(1,728)	27,892	30,382	(2,490)				
3001.04.02 - Biological Services	642	642	440	0	202	34,046	34,046	35,040	0	(994)	35,896	37,136	(1,240)				
3001.04.03 - Electrical Services	1,380	1,380	1,656	0	(275)	88,159	88,159	109,720	0	(21,561)	91,556	118,729	(27,173)				
3001.04.04 - Water/Sewer Services	1,259	1,259	1,475	0	(217)	92,027	92,027	117,509	0	(25,482)	94,944	127,217	(32,273)				
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	25	0	(25)	9,721	9,721	10,471	0	(751)	9,721	10,665	(944)				



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 (2018/10/22)								
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728			b. Phase Operations				b. To (2018/11/25)								
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		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)				
a. WORK BREAKDOWN STRUCTURE ELEMENT (Cont'd)																	
3001.04.07 - Fleet Services	171	171	0	0	171	8,863	8,863	7,322	0	1,541	9,199	7,322	1,877				
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	1	0	(1)	370	370	580	0	(210)	370	661	(291)				
3001.04.10 - Technical Services	791	791	621	0	170	41,697	41,697	47,207	0	(5,510)	43,424	50,879	(7,455)				
3001.04.11 - Energy Management	803	803	119	0	684	14,975	14,975	10,785	0	4,190	16,923	11,634	5,289				
3001.04.12 - Hanford Historic Buildings Preservation	150	150	193	0	(43)	21,057	21,057	23,106	0	(2,049)	21,725	24,484	(2,759)				
3001.04.13 - Work Management	269	269	191	0	78	14,592	14,592	18,605	0	(4,013)	15,167	20,162	(4,995)				
3001.04.14 - Land and Facilities Management	1,629	1,629	519	0	1,111	46,728	46,728	42,254	0	4,474	50,690	48,144	2,546				
3001.04.15 - Mail & Courier	131	131	65	0	66	7,960	7,960	6,683	0	1,277	8,621	7,014	1,606				
3001.04.16 - Property Systems/Acquisitons	1,239	1,239	592	0	647	54,168	54,168	55,297	0	(1,129)	57,299	59,290	(1,991)				
3001.04.17 - General Supplies Inventory	13	13	(57)	0	70	1,516	1,516	1,339	0	177	1,587	1,414	174				
3001.04.18 - Maintenance Management Program Implementation	486	486	80	0	406	12,276	12,276	9,923	0	2,353	13,394	10,363	3,030				
3001.06.01 - Business Operations	1,341	1,341	489	0	851	49,377	49,377	13,349	0	36,027	53,074	18,411	34,663				
3001.06.02 - Human Resources	737	737	309	0	428	25,126	25,126	22,612	0	2,513	26,947	24,481	2,465				
3001.06.03 - Safety, Health & Quality	2,839	2,839	1,682	0	1,157	158,073	158,073	166,116	0	(8,043)	164,863	175,897	(11,034)				
3001.06.04 - Miscellaneous Support	1,761	1,761	613	0	1,148	55,057	55,057	51,343	0	3,714	59,204	55,207	3,997				
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	750	750	311	0	439	62,011	62,011	57,561	0	4,450	64,011	59,079	4,932				
3001.08.01 - Water System	1,049	902	1,418	(147)	(516)	35,597	35,831	22,285	234	13,546	43,882	28,887	14,995				
3001.08.02 - Sewer System	701	415	530	(286)	(115)	16,413	15,742	18,106	(670)	(2,364)	16,661	19,109	(2,448)				
3001.08.03 - Electrical System	485	144	91	(342)	53	19,839	19,172	19,400	(667)	(227)	20,416	21,586	(1,170)				
3001.08.04 - Roads and Grounds	0	0	0	0	0	9,137	9,137	8,533	0	604	9,137	9,314	(177)				
3001.08.05 - Facility System	106	273	442	167	(169)	10,171	9,904	10,136	(266)	(231)	10,707	10,921	(214)				
3001.08.06 - Reliability Projects Studies & Estimates	464	464	404	0	60	15,255	15,255	17,122	0	(1,867)	17,759	19,714	(1,955)				
3001.08.07 - Reliability Project Spare Parts Inventory	118	118	5	0	113	3,472	3,472	3,200	0	272	4,179	3,885	295				
3001.08.08 - Network & Telecommunications System	204	75	62	(128)	13	18,022	17,935	20,192	(87)	(2,257)	18,205	20,446	(2,241)				
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	15,395	15,395	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)	50,227	49,491	27,121	(736)	22,370	2,324,928	2,323,471	2,351,465	(1,456)	(27,995)	2,463,431	2,533,637	(70,206)				



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 (2018/10/22)								
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728		b. Phase Operations		b. To (2018/11/25)												
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)								
<b>a2. WORK BREAKDOWN STRUCTURE ELEMENT</b>																		
3001.01.04 - HAMMER	1,561	1,561	1,609	0	(48)	119,598	119,598	134,126	0	(14,529)	124,015	142,816	(18,801)					
3001.02.04 - Radiological Site Services	1,186	1,186	748	0	437	65,920	65,920	58,469	0	7,451	72,360	63,890	8,470					
3001.02.05 - WSCF Analytical Services	1,167	1,167	0	0	1,167	79,148	79,148	53,176	0	25,972	85,486	53,176	32,310					
3001.03.02 - Information Systems	429	429	214	0	214	7,115	7,115	7,112	0	3	8,346	8,518	(172)					
3001.03.04 - Content & Records Management	168	168	66	0	102	2,446	2,446	2,190	0	256	2,867	2,624	243					
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	4,819	4,819	2,334	0	2,484	78,092	78,092	78,083	0	9	93,094	96,078	(2,984)					
3001.04.05 - Facility Services	1,289	1,289	943	0	346	67,259	67,259	75,467	0	(8,208)	70,839	81,640	(10,801)					
3001.04.06 - Transportation	285	285	557	0	(272)	37,519	37,519	47,623	0	(10,104)	38,494	51,907	(13,413)					
3001.04.07 - Fleet Services	1,306	1,306	1,476	0	(169)	115,676	115,676	134,844	0	(19,167)	119,804	143,675	(23,871)					
3001.04.08 - Crane and Rigging	2,010	2,010	1,177	0	832	108,742	108,742	113,562	0	(4,820)	113,959	120,305	(6,346)					
3001.04.10 - Technical Services	13	13	259	0	(246)	1,156	1,156	6,868	0	(5,712)	1,185	8,443	(7,258)					
3001.04.13 - Work Management	0	0	55	0	(55)	2,676	2,676	3,845	0	(1,169)	2,676	4,152	(1,477)					
3001.04.14 - Land and Facilities Management	996	996	935	0	62	60,983	60,983	65,364	0	(4,381)	64,751	70,427	(5,676)					
3001.04.15 - Mail & Courier	43	43	21	0	22	1,576	1,576	1,538	0	37	1,689	1,657	33					
3001.06.01 - Business Operations	1,383	1,383	974	0	410	102,421	102,421	104,134	0	(1,713)	107,346	109,401	(2,055)					
3001.06.02 - Human Resources	310	310	352	0	(42)	24,503	24,503	28,549	0	(4,046)	25,416	30,603	(5,187)					
3001.06.03 - Safety, Health & Quality	433	433	141	0	292	14,228	14,228	13,923	0	305	15,267	15,120	147					
3001.06.04 - Miscellaneous Support	149	149	328	0	(179)	13,004	13,004	16,337	0	(3,333)	13,470	17,655	(4,185)					
3001.06.05 - Presidents Office (G&A nonPMB)	429	429	184	0	246	26,214	26,214	25,170	0	1,044	28,089	26,856	1,234					
3001.06.06 - Strategy	57	57	17	0	40	3,019	3,019	2,862	0	157	3,163	2,999	163					
3001.A1.01 - Transfer - CHPRC	9,431	9,431	6,953	0	2,478	653,303	653,303	653,077	0	226	688,800	689,193	(393)					
3001.A1.02 - Transfer - WRPS	1,853	1,853	4,847	0	(2,994)	204,917	204,917	290,117	0	(85,200)	212,035	319,271	(107,236)					
3001.A1.03 - Transfers - FH Closeout	1	1	0	0	1	208	208	228	0	(20)	210	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	3,246	0	(447)	2,800	3,408	(608)					
3001.A2.02 - Non Transfer - AMH	17	17	0	0	17	1,269	1,269	954	0	315	1,343	954	389					
3001.A2.03 - Non Transfer - ATL	18	18	0	0	18	1,109	1,109	702	0	406	1,204	702	502					
3001.A2.04 - Non-Transfer - WCH	359	359	0	0	359	48,804	48,804	41,726	0	7,078	50,614	41,726	8,888					
3001.A2.05 - Non-Transfers - HPM	0	0	56	0	(56)	1,549	1,549	2,862	0	(1,313)	1,549	3,136	(1,587)					
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	27	0	(27)	273	273	963	0	(691)	273	1,153	(880)					
3001.A4.01 - Request for Services	582	582	508	0	75	102,532	102,532	110,404	0	(7,872)	104,665	113,536	(8,871)					
3001.A4.02 - HAMMER RFSS	3	3	213	0	(210)	26,279	26,279	33,172	0	(6,893)	26,297	34,477	(8,180)					
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	20	20	43	0	(23)	11,325	11,325	12,172	0	(847)	11,423	12,416	(994)					
3001.A5.01 - RL PD	192	192	46	0	146	6,537	6,537	6,327	0	209	6,899	6,508	391					
3001.A5.02 - ORP PD	0	0	61	0	(61)	6,463	6,463	7,965	0	(1,502)	6,463	8,173	(1,710)					



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			a. Name			a. Name			a. From (2018/10/22)									
Mission Support Alliance			Mission Support Contract			Mission Support Contract												
b. Location (Address and Zip Code)			b. Number			b. Phase			b. To (2018/11/25)									
Richland, WA 99352			RL14728			Operations												
c. TYPE			d. Share Ratio			c. EVMS ACCEPTANCE												
CPAF						No X Yes												
Item (1)	Current Period						Cumulative to Date					At Completion						
	Budgeted Cost		Actual Cost Work (4)	Variance		Budgeted Cost		Variance		Actual Cost Work (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)									
3001.A5.03 - RL Project Funded	49	49	515	0	(466)	3,771	3,771	12,040	0	(8,269)	4,039	14,002	(9,963)					
3001.A5.04 - ORP Project Funded	0	0	124	0	(124)	1,445	1,445	4,785	0	(3,340)	1,445	5,322	(3,877)					
3001.A6.01 - Portfolio PMTOs	37	37	37	0	(0)	866	866	813	0	52	1,066	1,138	(73)					
3001.A7.01 - G&A Liquidations	(2,791)	(2,791)	(2,424)	0	(367)	(186,120)	(186,120)	(199,051)	0	12,931	(195,644)	(213,009)	17,366					
3001.A7.02 - DLA Liquidations	(2,125)	(2,125)	(2,025)	0	(100)	(114,479)	(114,479)	(131,901)	0	17,422	(120,462)	(144,038)	23,576					
3001.A7.03 - Variable Pools Revenue	(13,095)	(13,095)	(8,472)	0	(4,622)	(635,931)	(635,931)	(646,305)	0	10,374	(681,363)	(697,750)	16,387					
3001.B1.01 - UBS Assessments for Other Providers	3	3	0	0	3	60	60	0	0	60	75	0	75					
3001.B1.02 - UBS Other MSC - HAMMER M&O	13	13	0	0	13	279	279	0	0	279	347	0	347					
3001.B1.03 - Assessment for Other Provided Services	125	125	0	0	125	2,877	2,877	0	0	2,877	3,553	0	3,553					
3001.B1.04 - Assessment for PRC Services to MSC	70	70	0	0	70	1,584	1,584	0	0	1,584	1,966	0	1,966					
3001.B1.07 - Request for Services	2	2	0	0	2	22	22	0	0	22	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)	12,800	12,800	12,932	0	(132)	1,078,644	1,078,644	1,183,147	0	(104,503)	1,127,554	1,258,096	(130,542)					
f. MANAGEMENT RESERVE											5,370	5,370	0					
g. TOTAL	63,027	62,291	40,053	(736)	22,239	3,403,572	3,402,114	3,534,612	(1,456)	(132,498)	3,596,354	3,797,102	(200,749)					
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 (2018/10/22)						
Mission Support Alliance			Mission Support Contract				Mission Support Contract										
b. Location (Address and Zip Code)			b. Number				b. Phase				b. To (2018/11/25)						
Richland, WA 99352			RL14728				Operations										
c. TYPE			d. Share Ratio				c. EVMS ACCEPTANCE										
CPAF							No <input checked="" type="checkbox"/> 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				\$741,387		\$3,596,353		\$0				\$3,596,353		\$3,596,354		\$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 (2)	BCWS FOR REPORT PERIOD (3)	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)														
			Six Month Forecast By Month									Remaining FY19 (14)	UNDISTRIBUTED BUDGET (15)	TOTAL BUDGET (16)			
			DEC FY19 (4)	JAN FY19 (5)	FEB FY19 (6)	MAR FY19 (7)	APR FY19 (8)	MAY FY19 (9)	(10)	(11)	(12)				(13)		
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	2,274,701	23,262	21,313	20,193	19,134	20,376	19,228	36,740							0	2,434,946	
b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	50,228	(23,262)	31	99	154	43	53	1,139							0	28,485	
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)	2,324,928		21,344	20,291	19,288	20,419	19,281	37,879							0	2,463,431	



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 (2018/10/22)									
b. Location (Address and Zip Code) Richland, WA 99352		b. Number RL14728			b. Phase Operations				b. To (2018/11/25)									
		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)											Remaining FY19 (14)	UNDISTRIBUTED BUDGET (15)	TOTAL BUDGET (16)		
			Six Month Forecast By Month									(10)	(11)				(12)	(13)
			DEC FY19 (4)	JAN FY19 (5)	FEB FY19 (6)	MAR FY19 (7)	APR FY19 (8)	MAY FY19 (9)										
a2. NON - PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)	1,065,844	9,016	8,008	8,006	7,567	8,063	7,892	9,373							0	1,123,769		
b2. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD	12,800	(9,016)	0	0	0	0	0	0							0	3,784		
c2. NON - PERFORMANCE MEASUREMENT BASELINE (End of Period)	1,078,644		8,008	8,006	7,567	8,063	7,892	9,373							0	1,127,554		
7. MANAGEMENT RESERVE																5,370		
8. TOTAL	3,403,572	0	29,352	28,297	26,855	28,482	27,173	47,252							0	3,596,354		



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

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

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

**3001.01.01 Safeguards and Security** – Favorable CM CV is primarily due to implementation of the Fiscal Year (FY) 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.01.02 Fire and Emergency** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.01.03 Emergency Management** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.01.04 HAMMER** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.02.02 Environmental Integration** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.02.03 Public Safety & Resource Protection** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.03.01 IM Project Planning and Controls** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.03.02 Information Systems** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.03.04 Content & Records Management** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.

**3001.03.06 Information Support Services** – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
<b>5. Evaluation</b>				
<p><b>3001.04.03 Electrical Services</b> – 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. The implementation of FY 2018 and FY 2019 Pension Proposal Contract Modifications that were point-adjusted in November 2018 partially offset the overruns.</p> <p><b>3001.04.11 Energy Management</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.04.14 Land and Facilities Management</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.04.16 Property Systems/Acquisitions</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.04.18 Maintenance Management Program Implementation</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.06.01 Business Integration &amp; Operations</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.06.02 Human Resources</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.06.03 Safety, Health &amp; Quality</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.06.04 Miscellaneous Support</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.07.01 Portfolio Management</b> – Favorable CM CV is primarily due to implementation of the FY 2018 and FY 2019 Pension Proposal Contract Modifications being point-adjusted in November 2018.</p> <p><b>3001.08.01 Water System</b> – Unfavorable CM CV is primarily due to paying prior-period construction subcontractor costs for project L-895, <i>Fire Protection Infrastructure for PRW.</i></p>				



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**Variable Service Pools - Non-Performance Measurement Baseline (PMB)** – The Work Breakdown Structure (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.

**3001.A1 – 3001.B1 Non-PMB** – Unfavorable CM CV is primarily the result of priority scope being divergent from the baseline for request for service (RFS) and inter-contractor work order (ICWO) activities.

**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** – Unfavorable CM SV is due to project L-894, *Raw Water Cross Connect Isolation 200 E/W*, performing less construction work on the 200W Raw Water Pumps than planned in the current month.

**3001.08.02 Sewer System** – Re-planning pipe installations on Phases 5 and 6 to accommodate other Hanford contractors operation schedule impacted completion of subsequent construction activities causing a net 31-day schedule slip and resulted in an unfavorable CM SV for project L-854, *200E Sewer Consolidations*.

**3001.08.03 Electrical System** - Unfavorable CM SV is due to project

L-801, *Upgrade SCADA*, because Contracts directed creating a new Request for Proposal (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 an eight-week schedule delay. L-801 will recover all but a net 36-day schedule slip. Not installing Pole Line A6 by the end of November caused a net 29-day schedule slip on L-791, *RFL Transfer Trip Upgrades*. Due to resolution of other Hanford contractor interface issues, the project expects recovery during the construction phase.

**3001.08.05 Facility Systems** – Costs and Performance incurred this month on project L-796, *Key Facilities Roof Replacements*, were originally budgeted for October resulting in a favorable CM SV.

**3001.08.08 Network & Telecommunications System** - Unfavorable CM SV is due to project ET51, *HLAN Network Upgrade – Phase 2A*, because network switches installation slipped from November to January.



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	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 Integrated Infrastructure Portfolio (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 FY 2018 are currently in development.

**Labor and Pension costs:** In November 2018, MSA implemented the FY 2018 and FY 2019 Pension Change Proposals. The 2017 Labor Adder Proposal was included with the FY 2017 Cost Variance Proposal and FY 2017 request for equitable adjustment (REA). The FY 2019 variances associated with labor adders will continue to grow throughout FY 2019.

**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 Environmental Management (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.



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
<b>5. Evaluation</b>				
<p><b>3001.04.03/04 Electrical/Water and Sewer Services</b> - 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 replacing the preventative maintenance method. Since FY IIP/funding authorizations adjust for these differences, mitigations are unnecessary at this time.</p> <p><b>3001.04.10 Technical Services</b> – 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.</p> <p><b>3001.06.01 Business Integration &amp; Operations</b> - Favorable CTD CV is primarily due to credits associated with affiliate fee on information technology (IT) scope and training on overtime pending final resolution.</p> <p><b>3001.06.03 Safety, Health and Quality</b> - Unfavorable CTD CV is primarily due to the IIP scope and approved funding increases in Radiation Protection, Worker Safety &amp; Health and Beryllium accounts. Since FY IIP/funding authorizations adjust for these differences, mitigations are unnecessary at this time.</p> <p><b>3001.08.01 Water System</b> - Favorable CTD CV is due to project L-894, <i>Raw Water Cross Connect Isolation 200 E/W</i>, because the Engineering Study report cost less than planned, conceptual design utilized fewer resources than originally planned, and both the Definitive Design and construction contracts experienced cost underruns. Project L-840, <i>24in Line Replacement from 2901Y to 200W</i>, 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, <i>Line Renovation/Replacement from 2901U to 200E</i>, had a fixed price contract, which was awarded/completed at a lower cost than budgeted. Projects L-399, <i>T-Plant Potable &amp; Raw Water Line Rest</i>, L-525, <i>24-inch Line Replacement from 2901Y to 200W</i>, and L-311, <i>Refurbish 200W Raw Water Reservoir</i>, also contributed to this favorable variance.</p> <p><b>3001.A1 – 3001.B1 Non-PMB</b> - Unfavorable CTD CV is primarily due to other Hanford contractors and government agencies requesting more usage-based services (i.e., Training, Crane &amp; Rigging, Fleet Services, Occupancy, etc.) than planned in the baseline. Since this work</p>				



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

scope is providing services as requested and provides full authorization through the Inter-Contractor Work Order/Request for Service (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 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:** MSA submitted the FY 2017 Cost Variance Proposal in October 2018, and anticipates submittal of the FY 2018 Cost Variance Proposal in December 2018. MSA plans submittal of the revised FY 2017 REA and the FY 2018 REA proposals for January 2019. 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 31-day 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 due to project L-801, *Upgrade SCADA*, because 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 an eight-week schedule delay. L-801 will recover all but a net 36-day schedule slip. Not installing Pole Line A6 by the end of November caused a net 29-day schedule slip on L-791, *RFL Transfer Trip Upgrades*. Due to resolution of other Hanford contractor interface issues, the project expects recover during the construction phase.



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
<b>5. Evaluation</b>				
<p><b>3001.08.05 Facility Systems</b> – Unfavorable CTD SV is due to a schedule misalignment on project L-888, <i>400 Area Fire Station</i>. A BCR will align the Architect-Engineer conceptual design schedule into P6.</p> <p><b>Impacts - Cumulative Schedule Variance:</b> Impacts to Reliability Projects are minimal because most reliability projects are independent stand-alone projects.</p> <p><b>Corrective Action – Cumulative Schedule Variance:</b> No corrective action is required because most of these projects are stand-alone.</p> <p><b>Variance at Complete:</b></p> <p>The VAC in the PMB is primarily due to the RL approved funding and priority list scope being divergent from the baseline for FY 2017, FY 2018 and FY 2019. For the Non-PMB, the delta is primarily due to Other Hanford Contractors (OHCs) requesting usage based services (UBS) above the amounts estimated in the baseline for FY 2017 – FY 2019.</p> <p><b>Impacts – At Complete Variance:</b></p> <p>The VAC is primarily due to the approved funding and priority list scope being divergent from the baseline, and the OHCs requesting UBS higher than the baseline amount. Mitigation actions to reduce the overall VAC are unnecessary at this time because the FY IIP/funding authorizations have already adjusted for these differences. However, MSA has requested that RL provide a Not to Exceed notification to align the baseline with the authorized funding. 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.</p> <p><b>Corrective Action - At Complete Variance:</b></p> <p>Cost Variance Proposals for FY 2009 through FY 2016 were previously negotiated and implemented into the baseline. The FY 2017 Cost Variance Proposal was submitted in October 2018, and submittal of the FY 2018 Cost Variance Proposal is anticipated in December 2018. MSA plans submittal of the revised FY 2017 REA, and the FY 2018 REA for January 2019. A proposal for FY 2019 is also in development for submittal during the first quarter of FY 2019. MSA has also requested a Not to Exceed amount from RL to cover the divergence in the baseline between the budget and authorized funding.</p> <p><b>Negotiated Contract Changes:</b></p> <p>The Negotiated Contract Cost for November 2018 increased \$32.2M from \$3,564.1M to \$3,596.3M, primarily due to the FY 2018 and FY 2019 pension cost proposals.</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>
<b>a. Name</b> Mission Support Alliance	<b>a. Name</b> Mission Support Contract		<b>a. Name</b> Mission Support Contract	<b>a. From (2018/10/22)</b>
<b>b. Location (Address and Zip Code)</b> Richland, WA 99352	<b>b. Number - RL14728</b>		<b>b. Phase - Operations</b>	<b>b. To (2018/11/25)</b>
	<b>c. Type</b> CPAF	<b>d. Share Ratio</b>	<b>c. EVMS Acceptance</b> NO X YES	
<b>5. Evaluation</b>				

**Changes in Estimated Cost of Authorized Unpriced Work:**

The Authorized Unpriced Work (AUW) for the reporting period remained at \$0M.

**Changes in Estimated Price:**

The Estimated Price for November 2018 had a minor increase of \$1.8M, from \$4,005.9M to \$4,007.7M. The Estimated Price includes the Most Likely Management Estimate at Completion (MEAC) of \$3,797.1M 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 through 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 percent 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, an FY 2018 submittal for both an REA and cost variance proposal is expected. Proposals for FY 2017 – FY 2019 are also included in the estimated price, consistent with the Not to Exceed amount requested by MSA.

**Differences between Current Month and Prior Month EAC's Format 1, Column (13) (e):**

During this reporting period, the Estimate at Completion (EAC) increased by \$1.8M from \$3795.3M to \$3797.1M: \$1.7M in the PMB, \$0.1M in the non-PMB and \$0M in management reserve. The PMB increase was primarily in the reliability projects and related to the timing and planning of FY 2019 projects. The non-PMB EAC changes for FY 2019 primarily reflect trending data from the OHCs, CH2M Hill Plateau Remediation Company (CHPRC) and Washington River Protection Project (WRPS).

**Changes in Undistributed Budget:**

The Undistributed Budget for this reporting period remained at \$0M.

**Changes in Management Reserve:**

The Management Reserve (MR) for this reporting period remained at \$5.3M.



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 (2018/10/22)
b. Location (Address and Zip Code) Richland, WA 99352	b. Number - RL14728		b. Phase - Operations	b. To (2018/11/25)
	c. Type CPAF	d. Share Ratio	c. EVMS Acceptance NO X YES	
5. Evaluation				

**Differences in the Performance Measurement Baseline (PMB):**

This reporting period the PMB increased by \$28.5M from \$2,434.9 to \$2,463.4M. The increase was primarily due to the following two BCRs incorporating Contract Modifications:

- VMSA-19-007 – Mod 751 – Definitization of FY 2018 Pension Cost Proposal
- VMSA-19-008 – Mod 752 – Definitization of FY 2019 Pension Cost Proposal

The following BCRs related to Reliability Project adjusted time phasing, but did not change the PMB:

- VRL0201RP-19-002 – Move All Remaining Budget from CENRTC – Out-Year Planning Package to Reliability Project Out-Year Planning Package
- VRL0201RP-19-004 – Re-Schedule L-894 Re-Vegetation Activities from Outside to Inside the MSA Period of Performance and Move Budget from Out-Year Planning

VRL0201RP-19-005 – Move L-898 Conceptual Design Budget to the Reliability Project Out-Year Planning Package as Project is delayed in FY 2019 Due to a Memorandum of Agreement (MOA).

**Differences in the Non - PMB:**

This reporting period the Non-PMB increased by \$3.9M from \$1,123.7M to \$1,127.6M. The increase was primarily due to the following two BCRs incorporated Contract Modifications:

- VMSA-19-007 – Mod 751 – Definitization of FY 2018 Pension Cost Proposal
- VMSA-19-008 – Mod 752 – Definitization of FY 2019 Pension Cost Proposal

**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 five 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 – November 2018					
Account Description	BCWS	BCWP	ACWP	CV	Liquidation
<b>Direct Labor Adder</b>					
Software Engineer Services DLA (3001.03.02.03)	\$573.9	\$573.9	\$431.6	\$142.3	\$(410.9)
Content & Records Management DLA (3001.03.01.04)	\$217.8	\$217.8	\$117.6	\$100.2	\$(121.1)
Transportation DLA (3001.04.06.02)	\$382.9	\$382.9	\$925.6	\$(542.7)	\$(1,019.5)
Maintenance DLA (3001.04.05.02)	\$1,435.1	\$1,435.1	\$1,449.2	\$(14.1)	\$(1,573.2)
Janitorial Services DLA (3001.04.05.03)	\$274.8	\$274.8	\$208.6	\$66.2	\$(197.2)
<b>Total Direct Labor Adder</b>	<b>\$2,884.5</b>	<b>\$2,884.5</b>	<b>\$3,132.6</b>	<b>\$(248.1)</b>	<b>\$(3,321.9)</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 – November 2018					
Account Description	BCWS	BCWP	ACWP	CV	Liquidation
<b>Usage Based Services</b>					
Training (3001.01.04.02)	\$2,081.1	\$2,081.1	\$2,515.6	\$(434.5)	\$(2,503.8)
HRIP (3001.02.04.02)	\$965.5	\$965.5	\$518.5	\$447.0	\$(814.3)
Dosimetry (3001.02.04.03)	\$988.9	\$988.9	\$878.9	\$110.0	\$(772.7)
Information Technology Services (3001.03.07.01)	\$6,589.2	\$6,589.2	\$5,009.1	\$1,580.1	\$(5,249.1)
Work Management (3001.04.13.01)	\$-	\$-	\$78.1	\$(78.1)	\$(66.2)
Courier Services (3001.04.15.02)	\$56.8	\$56.8	\$35.2	\$21.6	\$(33.6)
Occupancy (3001.04.14.06)	\$1,442.2	\$1,442.2	\$1,630.7	\$(188.5)	\$(1,660.8)
Crane & Rigging (3001.04.08.02)	\$2,622.5	\$2,622.5	\$1,954.7	\$667.8	\$(1,964.6)
Guzzler Trucks (3001.04.06.03)	\$17.5	\$17.5	\$-	\$17.5	\$-
Fleet (3001.04.07.02)	\$1,794.3	\$1,794.3	\$2,667.4	\$(873.1)	\$(2,221.3)
<b>Total UBS</b>	<b>\$16,558.0</b>	<b>\$16,558.0</b>	<b>\$15,288.2</b>	<b>\$1,269.8</b>	<b>\$(15,286.4)</b>
<b>Total DLA / UBS</b>	<b>\$19,442.5</b>	<b>\$19,442.5</b>	<b>\$18,420.8</b>	<b>\$1,021.7</b>	<b>\$(18,608.3)</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** – (\$1.0M) During the month of November 2018 (FY 2019), the FY 2018 and FY 2019 Pension Proposal Contract Modifications were implemented, causing a \$5.75M increase to the BCWS in total across all of the UBS/DLA accounts. This one time point adjustment increase to the variable service accounts BCWS resulted in the \$1.0M FYTD positive variance for November 2018 month-end.



8.0 RELIABILITY PROJECT STATUS

Activity in November 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			
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC	% Complete	Baseline Complete Date	Forecast Date	Schedule at Complete	VAC Cost
L-850, Replace 200W 1.1M-gal PW Tank	778.1	502.2	418.3	(275.9)	83.9	0.6	1.2	778.1	524.3	253.8	64.5%	11/05/18	3/05/19	R	G
L-849, Replace 200E 1.1M-gal PW Tank	767.3	483.0	490.6	(284.3)	(7.6)	0.6	1.0	767.3	673.2	94.1	62.9%	11/05/18	6/04/19	R	G
L-894, Raw Water Cross Connection Isolation 200E/W	4,359.4	6,318.8	5,164.3	1,959.4	1,154.5	1.4	1.2	8,012.4	5,894.9	2,117.6	78.9%	5/06/19	7/01/19	R	G
L-895, Fire Protection Infrastructure for Plateau Raw Water	1,094.1	1,050.5	1,284.3	(43.5)	(233.8)	1.0	0.8	3,570.6	3,893.7	(323.1)	29.4%	3/21/19	6/10/19	R	R
L-357, Replace 12" Potable Water Line to 222-S Lab	1,611.6	474.0	406.4	(1,137.6)	67.6	0.3	1.2	1,654.4	1,253.4	400.9	28.6%	1/03/19	5/07/19	R	G
L-781, 181D Vertical Turbine Pumps	11.3	10.3	15.2	(1.0)	(4.9)	0.9	0.7	605.7	609.2	(3.5)	1.7%	5/23/19	5/23/19	G	G
L-897, Central Plateau Water Treatment Facility	978.5	996.0	700.7	17.5	295.3	1.0	1.4	1,901.3	1,639.3	262.0	52.4%	5/23/19	5/23/19	G	G
L-826, 181B Vertical Turbine Pumps	11.3	10.3	11.0	(1.0)	(0.7)	0.9	0.9	605.7	605.0	0.7	1.7%	5/23/19	5/23/19	G	G
L-853, 200E Sewer Flow Equalization Facility	5,691.6	5,600.5	5,427.6	(91.1)	172.9	1.0	1.0	5,713.2	5,780.4	(67.2)	98.0%	1/28/19	3/21/19	R	G
L-854, 200E Sewer Consolidations	5,414.4	4,835.2	4,178.0	(579.2)	657.2	0.9	1.2	5,641.0	4,827.6	813.4	85.7%	1/08/19	3/05/19	R	G
L-789, Prioritize T&D Sys Wood PP Test & Replace	2,202.3	2,200.0	2,119.4	(2.3)	80.6	1.0	1.0	2,202.3	2,121.0	81.2	99.9%	9/27/18	12/13/18	R	G
L-612, 230kV Transmission System Reconditioning and Sustainability Repairs	1,198.3	1,194.2	962.7	(4.1)	231.5	1.0	1.2	1,211.4	989.1	222.3	98.6%	5/23/19	7/08/19	R	G
L-801, Upgrade SCADA	542.3	30.9	23.4	(511.4)	7.5	0.1	1.3	726.4	737.4	(11.0)	4.3%	12/20/18	2/28/19	R	G
L-791, RFL Transfer Trip Upgrades	395.6	213.7	108.8	(181.9)	104.9	0.5	2.0	602.1	672.1	(70.1)	35.5%	3/29/19	5/20/19	Y	G
L-720, Outdoor Lighting Reconfiguration and Repl	15.6	48.1	34.1	32.6	14.1	3.1	1.4	188.8	766.3	(577.4)	25.5%	5/23/19	4/16/19	G	R
L-888, 400 Area Fire Station	642.3	384.0	391.2	(258.2)	(7.1)	0.6	1.0	1,031.0	987.3	43.7	37.2%	4/18/19	6/03/19	Y	G
S-245, Live Fire Shoot House	3,653.2	3,645.7	3,813.5	(7.5)	(167.7)	1.0	1.0	3,653.2	3,837.4	(184.2)	99.8%	10/10/18	12/12/18	R	Y
L-796, Key Facilities Roof Replacements	259.1	262.6	266.0	3.5	(3.4)	1.0	1.0	262.6	267.9	(5.3)	100.0%	1/30/19	10/25/18	G	G
L-906, HFD Station 92 Expansion	4.9	0.9	13.7	(3.9)	(12.8)	0.2	0.1	149.5	177.1	(27.7)	0.6%	4/10/19	5/23/19	Y	G
ET51, HLAN Network Upgrade - Phase 2A	3,600.3	3,542.3	3,535.5	(58.0)	6.8	1.0	1.0	3,666.8	3,666.0	0.8	96.6%	1/31/19	1/31/19	G	G
L-905, FARS & RFARS Replacement & Upgrade	93.8	64.4	59.7	(29.4)	4.7	0.7	1.1	210.0	183.9	26.1	30.7%	4/10/19	6/18/19	R	G
<b>Total</b>	<b>33,325.1</b>	<b>31,867.7</b>	<b>29,424.4</b>	<b>(1,457.4)</b>	<b>2,443.3</b>	<b>1.0</b>	<b>1.1</b>	<b>43,153.6</b>	<b>40,106.4</b>	<b>3,047.2</b>					

Schedule at Complete	
G	On schedule
Y	1-30 working days behind schedule
R	>30 working days behind schedule

VAC Cost	
G	Underspent or <100K over
Y	>100K Over Spent
R	>300K Over Spent



## 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 construction and long lead procurements in FY 2019 due to partial funding for these activities in FY 2019 and the remaining funding for construction is in FY 2020 per the RPIP (11/29/18).
- 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 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-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 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 because 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. The procurement process is estimated at eight (8) weeks.

- L-791, *RFL Transfer Trip Upgrades*: Unfavorable SV is due to OHC interface issues and because certain requirements had changed the plan. The issues have been resolved, and a new recovery plan is being implemented.
- L-888, *400 Area Fire Station*: Unfavorable SV is due to the Project's P6 schedule differing from the Architecture/Engineering (A/E) vendor's conceptual design schedule. A BCR, once implemented in December, will correct the unfavorable schedule variance.
- ET51, *HLAN Network Upgrade – Phase 2A*: Unfavorable SV is due to the installation of network switches not being completed in November as planned. The installation will be completed in December.

## 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-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*: Unfavorable CV is attributable to overruns in engineering and other MSA labor support categories, driven, in part, by the Fire Water Demand/Pump Decision time period.
- 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. In addition, 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. The Cumulative Cost variance was reduced from last month due to the definitive design being awarded at higher than planned cost.

- *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-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-791, RFL Transfer Trip Upgrades*: Favorable CV is due to overstated performance with little associated cost. Changes in pole design caused issues with the procurement process timing in November. Overstated performance will be corrected in December.
- *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.

### **Variances 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. The VAC has been reduced from the last month due to additional costs associated with the 60% resubmittal reviews.
- *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. The VAC has



been reduced from the last month due to additional costs associated with the 60% resubmittal reviews.

- 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 due to a combination of variable frequency drive (VFD) quotes and equipment quotes received higher than budgeted, and overruns in engineering and other MSA labor support categories, driven, in part, by the Fire Water Demand/Pump Decision time period.
- 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.
- L-897, *Central Plateau Water Treatment Facility*: Favorable VAC is due to the contract award for procurement of conceptual design services being ~\$355K lower than the budget value. The VAC was reduced from last month due to definitive design awarded at higher than planned cost.
- L-853, *200E Sewer Flow Equalization Facility*: Unfavorable VAC reflects updated actuals from change orders awarded to the subcontractor, and pending change orders being reviewed by the Independent cost analyst. Additionally, overruns in MSA labor are the primary driver for the project VAC.
- 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-612, *230kV Transmission System Reconditioning and Sustainability Repairs*: Favorable VAC is due to completing the conceptual design subcontract for significantly less than planned. Additionally, planned values that were conservatively forecasted back in March, April, and May due to scope uncertainties have been removed, resulting in an increase in the VAC this month.



- L-791, *RFL Transfer Trip Upgrades*: Unfavorable VAC was due in part to late changes in the A6 pole design and late procurement of the poles and hardware. These two factors contributed to an inaccurate forecast that will be corrected in the December report.
- L-720, *Outdoor Lighting Reconfiguration and Replacement*: Unfavorable VAC is due to the spend forecast inaccurately recorded through the contract period of performance. The spend forecast should have been spread through the entire fiscal year. The spend forecast will be corrected in December.
- 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 (~\$991.9K), is \$48.3K.
- 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, additional change orders, 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	46	96.6%	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	113	28.6%	03-Jul-17	03-Jan-19	29-Jun-17 A	07-May-19					
L-612	L-612, 230kV Transmission System Reconditioning and Sustainability Upgrades	939	155	98.6%	31-Aug-15	23-May-19	31-Aug-15 A	08-Jul-19					
L-720	L-720, Outdoor Lighting Reconfiguration and Repl	153	98	25.5%	15-Oct-18	23-May-19	01-Oct-18 A	16-Apr-19					
L-781	L-781, 181D Vertical Turbine Pumps	163	125	1.7%	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	14	99.9%	01-May-18	27-Sep-18	24-May-18 A	13-Dec-18					
L-791	L-791, RFL Transfer Trip Upgrades	226	122	35.5%	07-May-18	29-Mar-19	07-May-18 A	20-May-19					
L-796	L-796, Key Facilities Roof Replacements	166	0	100%	04-Jun-18	30-Jan-19	29-May-18 A	25-Oct-18 A					
L-801	L-801, Upgrade SCADA	76	65	4.3%	04-Sep-18	20-Dec-18	04-Sep-18 A	28-Feb-19					
L-826	L-826, 181B Vertical Turbine Pumps	163	125	1.7%	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	132	62.9%	02-Jan-18	05-Nov-18	02-Jan-18 A	04-Jun-19					
L-850	L-850, Replace 200W 1.1M-gal PW Tank	216	68	64.5%	02-Jan-18	05-Nov-18	02-Jan-18 A	05-Mar-19					
L-853	L-853, 200E Sewer Flow Equalization Facility	867	80	98%	17-Aug-15	28-Jan-19	17-Aug-15 A	21-Mar-19					
L-854	L-854, 200E Sewer Consolidations	853	68	85.7%	17-Aug-15	08-Jan-19	17-Aug-15 A	05-Mar-19					
L-888	L-888, 400 Area Fire Station	245	131	37.2%	30-Apr-18	18-Apr-19	30-Apr-18 A	03-Jun-19					

Remaining Work  
 Actual Work  
 Baseline

**MSC - Reliability Projects**  
**Summary Schedule**  
**Data Date: 25-Nov-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-894	L-894, Raw Water Cross Connection Isolation 200EW	540	151	78.9%	04-Apr-17	06-May-19	30-Mar-17 A	01-Jul-19					
L-895	L-895, Fire Protection Infrastructure for Plateau Raw Water	431	136	29.4%	05-Jul-17	21-Mar-19	05-Jul-17 A	10-Jun-19					
L-897	L-897, Central Plateau Water Treatment Facility	374	125	52.4%	29-Nov-17	23-May-19	29-Nov-17 A	23-May-19					
L-905	L-905, FARS & RFARS Replacement & Upgrade	171	142	30.7%	06-Aug-18	10-Apr-19	06-Aug-18 A	18-Jun-19					
L-906	L-906, HFD Station 92 Expansion	142	125	0.6%	17-Sep-18	10-Apr-19	17-Sep-18 A	23-May-19					
S-245	S-245, Live Fire Shoot House	266	13	99.8%	21-Sep-17	10-Oct-18	21-Sep-17 A	12-Dec-18					

 Remaining Work  Actual Work  Baseline	<p align="center"><b>MSC - Reliability Projects</b>  <b>Summary Schedule</b>                  Data Date: 25-Nov-18</p>	
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## 9.0 BASELINE CHANGE REQUEST LOG (BCR)

Baseline Change Request Log for November 2018.

Nine Baseline Change Requests (BCRs) were processed in November.

Two BCRs incorporated Contract Modifications:

- VMSA-19-007 – Mod 751 – Definitization of FY 2018 Pension Cost Proposal
- VMSA-19-008 – Mod 752 – Definitization of FY 2019 Pension Cost Proposal

Three BCRs related to Reliability Projects:

- VRL0201RP-19-002 – Move All Remaining Budget from CENRTC – Out-Year Planning Package to Reliability Project Out-Year Planning Package
- VRL0201RP-19-004 – Re-Schedule L-894 Re-Vegetation Activities from Outside to Inside the MSA Period of Performance and Move Budget from Out-Year Planning
- VRL0201RP-19-005 – Move L-898 Conceptual Design Budget to the Reliability Project Out-Year Planning Package as Project is Delayed in FY 2019 Due to MOA

Four BCRs were Administrative in Nature:

- VMSA-19-002 Rev 1 – Administrative BCR – Implementation of Cost Centers for Functional Service Area (FSA) Organization Changes PMB & Non-PMB Excluding Portfolio Management Realignment
- VMSA-19-004 Rev 1 – Administrative BCR – Create Lower Level Task Order (LLTO) WBSs for Cost Collection Established in the Month of November
- VMSA-19-006 – CBAG, Revision 1 – Move FY 2019 HAMMER Budget from RL-40 to RL-0201
- VSWS-19-001 – Create One Level 4 and Five Level 5 WBSs for Realignment of Portfolio Management Scope and Cost Centers & Move Budget from Existing WBSs

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>Oct 2018</b>	1,230,506		1,230,506	1,230,506	175,150		1,204,440		2,434,945	2,434,945
VMSA-19-002 Rev 1						0		0		0	2,434,945
VMSA-19-004 Rev 1						0		0		0	2,434,945
VMSA-19-006						0		0		0	2,434,945
VMSA-19-007						19,649		19,649		19,649	2,454,595
VMSA-19-008						8,835		8,835		8,835	2,463,430
VRL0201RP-19-002						0		0		0	2,463,430
VRL0201RP-19-004						0		0		0	2,463,430
VRL0201RP-19-005						0		0		0	2,463,430
VSWS-19-001						0		0		0	2,463,430
<b>Revised PMB Total</b>	<b>Nov 2018</b>	1,230,506		1,230,506	1,230,506	203,635		1,232,924		2,463,430	
<b>Prior Non-PMB Total</b>	<b>Oct 2018</b>	604,007		604,007		64,849		519,763		1,123,770	1,123,770
VMSA-19-002 Rev 1						0		0		0	1,123,770
VMSA-19-004 Rev 1						0		0		0	1,123,770
VMSA-19-007						2,670		2,670		2,670	1,126,440
VMSA-19-008						1,114		1,114		1,114	1,127,554
<b>Revised Non-PMB Total</b>	<b>Nov 2018</b>	604,007		604,007		68,633		523,547		1,127,554	
<b>Total Contract Performance Baseline</b>	<b>Nov 2018</b>	1,834,513		1,834,513	1,834,513	272,268		1,756,471		3,590,984	
<b>Management Reserve</b>	<b>Oct 2018</b>		0	0			5,370		5,370	5,370	5,370
<b>Revised Management Reserve</b>	<b>Nov 2018</b>		0	0			5,370		5,370	5,370	
<b>Total Contract Budget Base</b>	<b>Nov 2018</b>			1,834,513				1,761,841		3,596,354	
<b>Prior Fee Total</b>	<b>Oct 2018</b>	109,961		109,961		14,316		100,648		210,608	210,608
<b>Revised Fee Total</b>	<b>Nov 2018</b>	109,961		109,961		14,316		100,648		210,608	
<b>Change Log Total</b>	<b>Nov 2018</b>			1,944,473				1,862,489		3,806,962	



## 10.0 RISK MANAGEMENT

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

- The October Risk Management Board was postponed and was combined with the November Risk Management Board due to resource availability. As a result, the combined Risk Management Board was held to review the overall company risk posture associated with September and October data. The following items were approved:
  - Three new Mission Risk and associated Risk Handling Plans: two related to Site Services & Integration Management (SS&IM), and one related to Information Management (IM).
  - Two Mission Risks were closed: one related to Environmental, Safety, Health & Quality (ESH&Q), one related to Public Works (PW).
  - Five Mission Risks were significantly re-characterized: one related to Emergency Services (ES), one related to PW, and three related to IM.
  - There were three new Reliability Project risks: one for Project L-612, *230kV Transmission System Sustainability Upgrades*, and two for Project L-801, *Upgrade SCADA*.
  - Seven Project Risks were significantly re-characterized: one for Project L-357, *Replace 12-in. Potable Water Line to 222-S Lab*; two for Project L-854, *200E Sewer Consolidations*; three for L-791, *RFL Transfer Trip Upgrades*; and one for *HSPD-12 (Homeland Security Presidential Directive – 12)*.
  - Thirteen Project Risks were closed: one for Project L-357; one for Project L-815, *Upgrade Transmission/Distribution Access Roads*; seven for Project S-245, *Live Fire Shoot House*; and four for the Enterprise Asset Management (EAM) implementation project.
- Mission Risk Management:
  - Operations Change Control Board (OCCB) Packet Review: The OCCB packet was reviewed and assessed for risks for new work scope.
- Project Risk Management:
  - 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:
  - Change Proposal Support: An informal risk review was performed, and the Sensitivity Analysis for the Minimum Safety and Essential Services Cost Review proposal was completed.
  - Risk Register Replacement Software Initiative: The EROMS software entered acceptance testing, and the first release is planned for December. Implementation and an additional release will follow.



## 11.0 DASHBOARD SUMMARY

Table 11-1. Performance Evaluation and Measurement Plan (PEMP)

		November FY 2019 Fiscal Year 2019 PEMP		Status	
		Deliverables		YTD	Nov
<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				

**LEGEND**

= On Schedule

= Objective missed

N/A = Not Applicable (Updated quarterly)

= Complete

= In jeopardy



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

		November FY 2019		Fiscal Year 2019 PEMP		Status	
		Deliverables				YTD	Nov
<b>1.0 Effective Site Cleanup - Achievement of cleanup contractors' key milestones and regulatory commitments</b>							
1.2	Water	Demonstrate effective management of electric, water and sewer utilities to maximize reliability and				On Schedule	On Schedule
		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					
	Quarterly System Health Report by Engineering submitted one calendar month after each quarter						
	Sewer	Perform Preventative maintenance at 90% or better each month					
		Maintain backlog corrective maintenance average age of open work packages to 300 days or less					
		Quarterly System Health Report by Engineering submitted one calendar month after each quarter					
	Electric	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							
1.3	Demonstrate effective development and management of reliability projects that assure mission milestones and regulatory commitments are met				On Schedule	On Schedule	
	a	L-894, Raw Water Cross Connections - Complete construction of the cross tie line.					
	b	L-897, Central Plateau Water Treatment Facility (DFLAW Essential) - Complete 90% of design.					
	c	L-850, Replace 200W 1.1M-gal PW tank (DFLAW Essential) - Complete 100% of design.					
	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					

**LEGEND**

	= On Schedule		= Objective missed		= Not Applicable (Updated quarterly)
	= Complete		= In jeopardy		

**1.2.b** – Yellow for November, Green overall. The average PSI for the month of November was 128.09. Support of work for other Hanford contractors required the raw water grid be maintained at a higher PSI than in previous months. Annual Interface Control Document raw water pressure requirements are being met.

**1.3.c** – Yellow for November, Green overall. For Project L-850: The 60% design package submittal was rejected as incomplete. Currently in meetings with the Architecture & Engineering firm on the recovery plan to meet final deliverable quality and schedule.



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

November FY 2019 Fiscal Year 2019 PEMP		Status	
		YTD	Nov
Deliverables			
<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.		
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.		
	a Through the CLC and CIB processes, provide DOE-RL with an unfiltered, forward looking view of emerging operational, budget, regulatory, or contractual issues.		
	b Conduct Operational Excellence Events: 40% of MSA's FY19 Operational Excellence events will be focused on crosscutting inter-contractor Site Integration opportunities.		
	c Full implementation of the MSA Assurance system to cover Operations, Financial, Maintenance, Work Management, Emergency Management, Safety and Environmental.		
	d Conduct monthly performance reviews using the Mission Assurance System demonstrating achievement of MSA's service levels, key milestones and regulatory commitments using a fully Implemented system.		
	e Prepare Transition Plan for contract turnover,		
f Prepare Closeout Plan for MSC closeout. Support activities associated with Contract Closeout (subcontracts, incurred cost submissions/audits, accounting reconciliations, etc.).			
<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		
	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 November, and provides a look ahead through December 2018.

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

CDRL	Deliverable	Responsible	Date Due	Date Submitted to DOE	Action	Response Time	Date Due from DOE	Date Approved by DOE
CD0112	Inventory Accuracy Reports	Olsen	11/01/18	10/23/18	Information	N/A	N/A	
CD0113	Inventory Accuracy Reports	Olsen	11/01/18	10/23/18	Information	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	
CD0051	Milestone Review and IAMIT Meeting Minutes - Oct	Wilson	11/05/18	Not submitted	Information	N/A	N/A	
CD0123	Monthly Billing Reports for DOE Services - Oct	Eckman	11/05/18	11/05/18	Information	N/A	N/A	
CD0144	Monthly Performance Report - Sep	Olsen	11/10/18	11/07/18	Review	None	N/A	
CD0046	Self-Assessment and Corrective Actions	Walton	11/15/18	11/08/18	Review	30 days	12/08/18	
CD0182	Site-Wide Assessment of Institutional Controls	Synoground	11/15/18	10/30/18	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	11/28/18	Review	30 days	12/28/18	
CD0051	Milestone Review and IAMIT Meeting Minutes - Oct	Wilson	12/01/18		Information	N/A	N/A	
CD0123	Monthly Billing Reports for DOE Services - Nov	Eckman	12/05/18	11/28/18	Information	N/A	N/A	
CD0051	River Corridor/Central Plateau Quarterly Tri-Party Agreement Milestone Review Meeting Minutes - September 2018	Wilson	12/10/18	12/10/18	Link to AR	N/A	N/A	N/A
CD0144	Monthly Performance Report - Oct	Olsen	12/10/18	12/06/18	Review	None	N/A	
CD0189	Site Sustainability Plan	Wilson	12/13/18	12/11/18	Review	N/A	N/A	
CD0008	Force-On-Force Test Results	Walton	12/14/18		Review	45 days	N/A	
CD0043	Limited Emergency Preparedness Evaluation / Training Exercise Reports	Walton	12/22/18		Approve	45 days		
CD0100	Site-Wide Institutional Controls Plan	Synoground	12/26/18		Review	30 days	N/A	
CD0084	Bonneville Power Administration (BPA) Power and Transmission Service invoice verification and breakdown of site contractor costs - Oct	Synoground	12/30/18		Review	30 days	N/A	
CD0076	Annual Catalog - Seismic	Wilson	12/31/18		Review	30 days	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%	68.4%	60.5%
Small Disadvantaged Business	10.0%	13.8%	17.6%
Small Women-Owned Business	6.8%	20.9%	13.5%
HubZone	2.7%	6.3%	5.5%
Small Disadvantaged, Service Disabled	2.0%	5.5%	6.2%
Veteran-Owned Small Business	2.0%	5.4%	7.3%
Local Small Business	Highest Preference	39.8%	-

Through November 2018

### Prime Contract Targets:

- At least 40% contracted out beyond MSA, LLC = 45% (\$1.709B/\$3.817B)
- Small Business 25% of Total Mission Support Contract (MSC) Value = 27% (\$1.035B/\$3.817B)