

MISSION SUPPORT ALLIANCE

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



Monthly Performance Report

May 2018

R. E. Wilkinson
President

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



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

TERMS

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

ACRONYMS LISTING



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

ACRONYMS LISTING



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

MSA SUMMARY PERFORMANCE

Current Contract Status

FCD Rating: Green

BAC: \$3,543M **EAC:** \$3,746M **Remaining MR:** \$5.1M

Scope Statement: MSA is the integrator of a multi-contractor effort to provide quality infrastructure & sitewide services at Hanford.

Safety Index: 12 month rolling avg: TRC = 0.64 DART = 0.23

Accomplishments:

1. Conducted Annual Emergency Response Site Field Exercise at the 325 Facility on May 17, 2018.
2. Efforts initiated to reduce approximately 135 cubic feet of paper stored in Records Holding Area, via scanning, indexing and verifying record cards created as document finding aids.
3. Participated in, and helped facilitate, the Clear Path VI exercise in support of the DOE Office of Electricity Delivery and Energy Reliability's Infrastructure Security and Energy Restoration Division.

Major Issues:

None to report.

Current Risks:

2 new Mission risks and associated new Risk Handling Plans were approved related to MSA Information Management and Public Works functions, as well as 12 new Reliability Project Risks.

Funding Status:

Revised
Expected
funding:
\$351.6M
Funds
Received:
\$275.7M

Cost / Schedule

As of May 2018 CMR

| PBS | Cost (CPI) | Trend | Sched (SPI) | Trend | Notes |
|---------------|------------|-------|-------------|-------|--|
| PMB | 0.91 | ↑ | 0.99 | ↑ | CPI reflects Labor and Pension adds, Safeguards and Security, Emergency Response, and Maintenance Costs (water/electric/sewer) above the baseline estimate. Mid-year forward pricing rate change also implemented in May 2018. |
| Non-PMB | 0.64 | ↓ | 1.0 | ↔ | CPI reflects MSA providing more service delivery activities/UBS than planned in the baseline to the Other Hanford Contractors. |
| Total Segment | 0.81 | ↑ | 1.0 | ↑ | |

Notes: Above data is Current Month
Performance Management Baseline (PMB) includes work scope directly funded by DOE-RL non-PMB work scope encompasses the service delivery activities/Usage-Based Services funded by customers (i.e., on-site and offsite).

Milestones/Deliverables

Deliverables for May 18

| PBS | Description | Date | Status |
|---------|--|----------|----------|
| SWS | CD0051, Milestone Review and IAMIT Minutes – Mar | 05/05/18 | Complete |
| UBS | CD0123, Monthly Billing Reports for DOE Services – Apr | 05/05/18 | Complete |
| RL-0201 | CD0144, Monthly Performance Report – Mar | 05/10/18 | Complete |
| SWS | CD0035, Hanford Site Wildland Fire Plan | 05/15/18 | Complete |
| SWS | CD0084, Bonneville Power Administration (BPA) Power and Transmission Service invoice verification and breakdown of site contractor costs – Nov | 05/30/18 | Complete |

Change Requests Pending:

- 300 Area Water and Sewer Systems Proposal, submitted 11/30/17
- Enterprise Health Records System Replacement, submitted 01/31/18
- Hanford Workforce Engagement Center, submitted 2/15/18

Key Performance Measures

| PBS | Description | Metric | Achvd | Status | Notes |
|-------|---|--------|-------|--------|--------------------------------------|
| Multi | PI 1.0 Effective Site Cleanup – Achievement of cleanup contractors' key milestones and regulatory commitments | Var | | Green | 9 targets complete, 41 targets green |
| Multi | PI 2.0 Efficient Site Cleanup – Align resources and capabilities to support the site cleanup mission | Var | | Green | 4 targets green |
| Multi | PI 3.0 Comprehensive Performance | Var | | Green | 14 targets green |

UBS = Usage Based Service SWS = Site Wide Services
PI = Performance Incentive

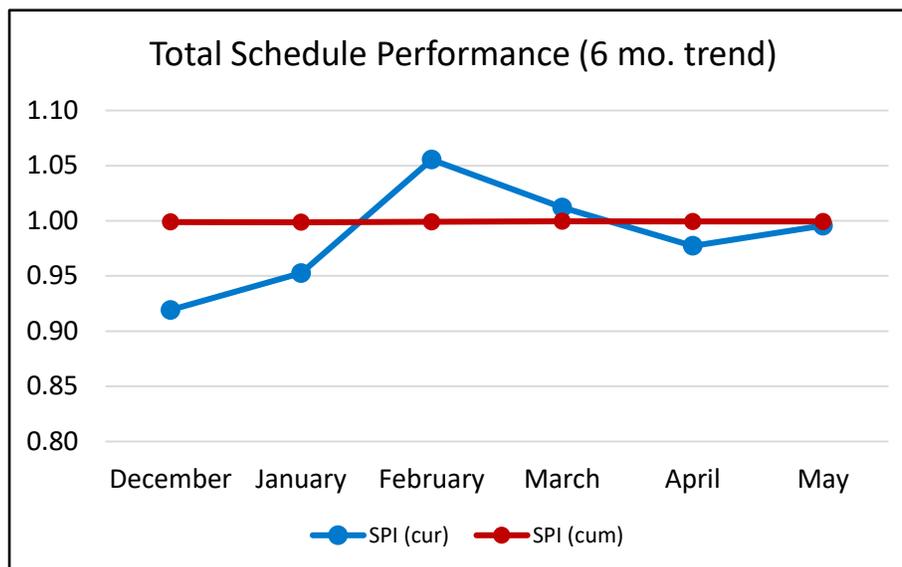
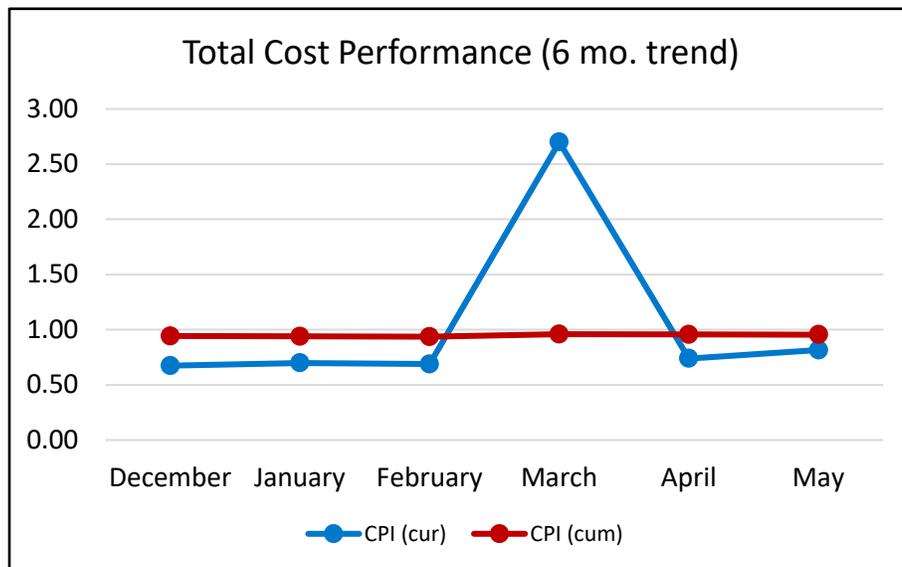
Note: Key Performance Measures PBS's included are RL-0040 Uncosted, RL-0201, and RL-0020 new BA.



MSA SUMMARY PERFORMANCE, CONT.

Cost and Schedule Trend

Total Segment:





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 May 2018.

1.1 KEY ACCOMPLISHMENTS

Fiscal Year (FY) 2018 Contract\Baseline Alignment Guidance (CBAG), Rev. 5 – MSA received the FY 2018 CBAG Rev. 5, on May 22, 2018, which included additional funding to execute several items on the MSA Unfunded List. The additional funding was based on the FY 2018 Omnibus appropriations bill. MSA Program Controls incorporated these items into the FY 2018 Integrated Investment Portfolio for May month-end performance processing.

Emergency Management Annual Site Field Exercise – MSA Emergency Management personnel conducted the Annual Site Field Exercise at the 325 Facility on May 17, 2018. The exercise was used to evaluate Hanford emergency organizations' response to an emergency at the 325 Radiochemical Processing Laboratory operated by the Pacific Northwest National Laboratory (PNNL). Offsite emergency agencies from Washington and Oregon states, and Benton, Franklin, and Grant counties participated, as well as Kadlec Medical Center.

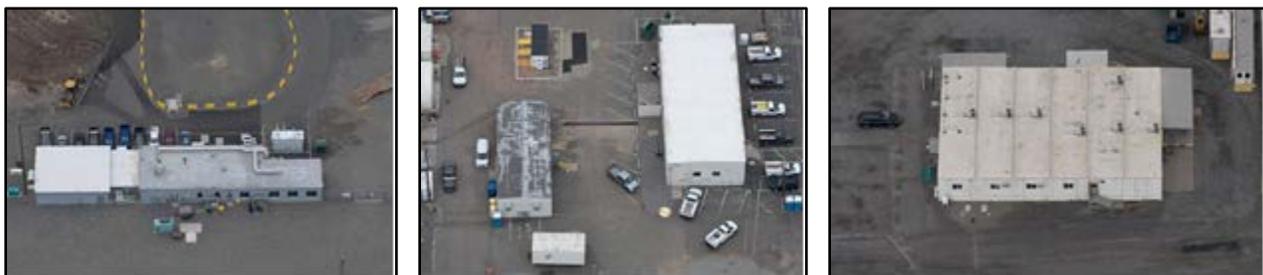
MSA Reducing Paper Footprint – In May, the MSA Content and Records Management, Imaging Operations (IO) team began a project to help reduce the amount of paper stored in Building 3220 at the Records Holding Area (RHA). They began scanning, indexing and verifying record cards created as document finding aids. The IO team estimates they will image approximately 240,030 cards, leading to the elimination of some 135 cubic feet of paper.

Clear Path VI Exercise – On May 3, 2018, staff members from the Volpentest HAMMER Federal Training Center (HAMMER) participated in and helped facilitate the Clear Path VI exercise in support of the DOE Office of Electricity Delivery and Energy Reliability's Infrastructure Security and Energy Restoration Division. The exercise, located in Washington, D.C., focused on hurricane response and energy restoration to prepare for the 2018 hurricane season. The Clear Path Exercise series is DOE's flagship energy sector emergency response exercise. Clear Path VI continued the Department's

objective of bringing industry and government response partners together annually to advance lessons learned from real-world energy sector responses, energy focused exercises, industry recommendations, and the Department's desire to focus on cross-sector industry and government coordination. Clear Path VI expanded on the successful implementation of the third regionally-focused Clear Path exercise, which occurred in May 2017, and was cited by multiple sector participants as crucial to preparing for a similar real-world event a few months later with Hurricane Harvey. This year's exercise was linked to the Federal Emergency Management Agency's National Level Exercise 2018, sharing a common scenario based on a hurricane striking the Washington, D.C. area.

Forward Pricing Rate Change – After receiving RL contracting officer approval, MSA Finance implemented a mid-year forward pricing rate change in the Business Management System on May 8, 2018. All approved rates were changed fiscal year to-date. The October 2017 to April 2018 passback to the Performance Measurement Baseline was approximately \$1.7 million (M). The revised rates were applied in the system for May through September 2018.

Aerial Photography for Roof Replacement Project – MSA Project Services personnel used an innovative approach while planning multiple roof replacements. During the planning and bidding process, high resolution photos were taken of the building roofs using the regularly scheduled aerial photography flights. The photos were then used to eliminate any safety concerns associated with putting multiple people (vendors, MSA personnel) onto the roofs. Entire roofs could be viewed in high resolution, providing vendors with a safe way to observe current conditions. The major benefits of aerial photography are risk mitigation and time/cost savings; however, site walks of the job were still performed to identify and verify surrounding field conditions, including overhead power lines and other potential hazards around the facility.



Condition of roofs captured by aerial photography

Waste Disposition at 182D Basin – In May, MSA Water and Sewer Utilities (W&SU) staff assisted in waste disposition at the 182-D Basin cleanup efforts. Several piles of tumbleweeds and other debris around the 182-D Basin were removed and placed into eight Environmental Restoration Disposal Facility (ERDF) roll-on/roll-off cans.



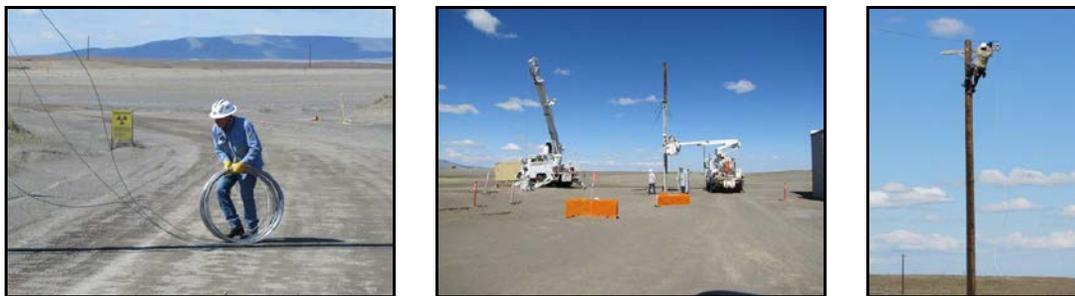
Area round B182-D Basin before and after cleanup

Brush Mowing in 218-W-4C Annex Area – In preparation for the Container Storage Area being installed in the Plutonium Finishing Plant (PFP) expanded Radiological Buffer Area, MSA Biological Controls staff completed brush mowing of a five-acre section of the 218-W-4C Annex area. This work was completed on May 2, 2018, under an emergency declaration of Facility Owner, with no issues to equipment or personnel in the Access Control Boundary.



218-W-4C Area cleared of vegetation

Removal of Electrical Service – During the week ending May 6, 2018, MSA Electrical Utilities personnel removed 14 transformers from eight electrical services, several spans of overhead primary wire, several cross arms, and eight electrical meters serving mobile offices in support of the cleanup operations at the CH2M HILL Plateau Remediation Company (CHPRC) 618-10 project.



Removing electrical service to mobile offices as part of 618-10 cleanup

Removal of Connex Boxes – At the request of CHPRC, MSA Crane & Rigging personnel supported demolition preparation activities at the Research Technology Laboratory facility in the 300 Area. Using an 80-ton crane, workers removed and relocated numerous connex boxes in order to make room for demolition equipment.



Crane used for removal of connex boxes

Crane & Rigging Support to PNNL – The Crane & Rigging crew supported PNNL in transporting a spent fuel shipping cask containing irradiated Tritium Producing Burnable Absorbing Rods (TPBARs) to the High Level Radiochemistry Facility (HLRF) A-cell hot cell.



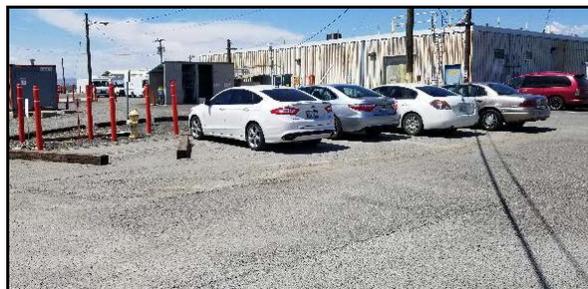
Setting cask on "tilt frame"

Flatbed Truck Up-Fitted for Spray Activities – MSA Fleet Services staff up-fitted a newly acquired General Services Administration (GSA) flatbed truck with a tank, pump, hydraulic controls, and spray nozzles for use by Biological Controls during its summer spray campaign. This new truck and spray equipment is capable of treating larger areas, resulting in a more efficient use of resources.



Truck up-fitted for spray activities

Parking Lot Enhancements – MSA Maintenance Services workers created 18 new parking spaces at 2101M and 10 new parking spaces at the 2266E Facility, a solution identified by a diverse team, including Safety, management, and craft, focused on reducing vehicle incidents. This action directly addresses one of the most significant vehicle incident areas, parking and parking lots, and is a proactive corrective action aligned with MSA's goal to reduce incidents and address a common worker concern.



Additional parking at 2101M and 2266E

Engineering Maintenance Management Program Workshop – The MSA Central Engineering team partnered with stakeholders from RL, MSA Operations, Electrical Utilities, Water Utilities and Project Services to conduct a workshop on a proposed MSA Engineering Maintenance Management program upgrade. The purpose of the workshop was to bring the correct stakeholders together to review the proposed path forward for the upgrade and solicit input to revise the model to ensure success in implementation of the new process. In session, the team identified several improvements to the proposed process and reporting structure, which will ensure the successful integration of the correct maintenance data into the process, and give key



stakeholders the information they need to prioritize backlog and deferred maintenance of infrastructure projects in support of the Hanford mission.

MSA Assurance Program (MAP) – MSA continued software development to integrate MSA’s performance and business practices to present a clear and objective depiction of MSA’s achievement toward key deliverables, facilitate risk informed decision making, and to drive continuous performance improvement. The MAP will allow MSA to monitor its overall business profile and transparently convey progress to DOE and other oversight entities. The MAP is an assurance program that encompasses elements from existing foundational programs such as the Contractor Assurance System (CAS), Integrated Safety Management Systems, Operations, Financial Reporting, and Conduct of Operations, while incorporating data and metrics from all areas of MSA, to objectively demonstrate MSA’s mission execution health.

Accomplishments in May included:

- Three sets of MAP enhancements were released on May 3, 2018, and on May 16, 2018. Some of the key enhancements include improved performance (speed); added publishing capabilities; the ability to designate a metric as a Performance Indicator (PI) metric; the ability to be selective in showing a series in the metric graph for performance based metrics; the combination of metric details and metric quad charts into a single view; and the creation of an at-risk report.
- Specialized “scorecards” were created within MAP for the Executive Safety Review Board (ESRB), the Operations Dashboard, and the PI metrics, all for increased ease of reporting.

Milestone Internal Scenario Tool (MIST) – In support of the RL Assistant Manager for River Protection (AMRP) organization, MSA obtained Software Quality Assurance and Production Readiness Review Board approval of the email notification functionality in the MIST, and then released it to Production on May 3, 2018. AMRP staff uses the tool to view and manage yearly project planning cases for Tri-Party Agreement (*Hanford Federal Facility Agreement and Consent Order*) milestones via data from the Integrated Technical Data-mart. The database aligns milestones with respective scenario information for each planning case, and provides the ability to run numerous “what if?” reports.

Continuity of Operations Drill – MSA Emergency Management staff participated in the Federal Continuity of Operations (COOP) Eagle Horizon Exercise on May 7, 2018. Participation consisted of receiving notifications from the Department of Energy, Head



Quarters (DOE-HQ) and issuing telephone system notifications to the Office of River Protection (ORP) and MSA COOP Emergency Response Group members.

Radiological Access Control Program Implemented – MSA has successfully landed the new radiological access control program, SENTINEL, on the Hanford Local Area Network (HLAN), built all the necessary interfaces to the Hanford site-wide systems, developed the Hazardous Materials Management and Emergency Response training required to operate the software, deployed the software to software distribution, and, as of May 21, 2018, implemented the new program across all MSA projects.

Ambient Air Sampling Stations – In early May, MSA Radiological Control Technicians (RCTs) accommodated an urgent request to install and put into operation a new ambient air sampling station near the B-Reactor facility. The station began operations on May 1, 2018. In addition to the MSA sampling station, Washington State Department of Health (WDOH) also set-up an air sampling station at the same location as part of its oversight role of Hanford activities on behalf of the citizenry of Washington State. Both sampling stations will provide assurance to visitors on tour of the B Reactor Museum that they have not been exposed to airborne radioactive contaminants during their visit.

Quarterly Security Patching Complete – On May 8, 2018, MSA's Information Management (IM) Oracle¹ Database Administration team completed the 2018 Quarterly Oracle Database Critical Security Patching of Production databases. This patching provides critical security patching for all Oracle databases' versions, along with needed patches for other Oracle applications, thus ensuring improved reliability and maintainability.

Central Milestone Module – In May, MSA enhanced and released an upgrade to the Central Milestone Module (CMM). The CMM now links the Tri-Party Agreement milestone identification numbers to the DOE Integrated Planning, Accountability, and Budgeting System (IPABS) numbers. This facilitates a rapid analysis of current milestones which must be included in Budget Formulation submittals to the DOE-HQ Office of Environmental Management.

Hanford Tours – The 2018 Hanford Site Cleanup Tours began in May, as tours #1-4 were held for 73 visitors. The tours provide members of the public insight into the progress of Hanford's environmental cleanup projects. This year's tour program

¹ Oracle Corporation is an American multinational computer technology corporation, headquartered in Redwood Shores, California.



highlights the Cold Test Facility, 324 Building Disposition Project, 200 West Groundwater Treatment system and the Vitrification Plant.

B Reactor Tour Web Registration Launched – MSA IM Information Systems staff, working with the B Reactor Tours Team, launched the B Reactor Tour Web Registration website. The B Reactor Tour Web Registration provides a web-based application that allows Hanford employees, and the public to register for B-Reactor site tours.

Supporting Talent & Engaging Professionals for Success Program (STEPS) Development Program – On May 16, 2018, the first class of the STEPS development program for future leaders finished their program. The curriculum included off-site learning sessions, on-site activities, as well as a mentorship with a member of the MSA Hi-Potential Program. Human Resources personnel organized a graduation ceremony to commemorate the successful completion of the program for the 20 participants. Survey responses collected from participants indicated that the program was a success, with participants sharing that they have learned valuable strategies that will be very beneficial in future leadership roles.



1.2 READY TO SERVICE SUPPORT TO THE PLUTONIUM FINISHING PLANT

MSA continues to provide incremental support to the PFP project beyond Performance Measurement Baseline funding targets to ensure worker and public safety. MSA support activities include:

- PFP Control Zone assistance to PRC, including the relocation of personnel from the demolition zone.
- Permitting support to the PFP trailer park area.
- Meteorological and climatological data posted on the internet so that field workers can monitor wind speed with portable devices.
- De-energizing distribution lines to allow for safe application of contamination fixatives.
- Emergency Services support by Patrol, Fire, and Emergency Response to PFP.
- IM support for computers, telephone, and server availability.
- Other departments supporting PFP; Engineering, Risk, and External Affairs.

Incremental support cost to PFP is tracked in discrete charge codes for reliable reporting. The magnitude of the incremental cost is difficult to estimate at this time due to operational uncertainties.

1.3 LOOK AHEAD

Revisions for Site Wide Standards – Three Site Wide Safety Standards are impacted by the issuance of the 10 CFR 851 Technical Amendment: DOE-0359, *Hanford Site Electrical Safety Program*, DOE-0336, *Hanford Site Lockout/Tagout Procedure*, and DOE-0352, *Hanford Site Respiratory Protection Program*. Committees for each of the three standards have been diligently working on these required revisions. The Respiratory Protection committee is currently in the first round of comment resolution for DOE-0352; upon completion of the comment resolution, it will be determined if a second round of review is needed. The Electrical Safety Committee is also working to resolve comments for the first round of review, and expects a second round of review and comments will be required. The Lockout/Tagout committee is finalizing its draft of DOE-0336, and expects to send it for the first round of review in mid-June.

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 | \$241.0 | \$241.0 | \$40.0 | \$201.0 |
| RL-0020 | Safeguards & Security | \$83,347.9 | \$58,566.9 | \$47,103.4 | \$11,463.5 |
| RL-0040 | Reliability Projects/HAMMER/ Inventory | \$12,416.3 | \$8,388.2 | \$4,845.1 | \$3,543.1 |
| RL-0201 | Hanford Site-Wide Services | \$32,179.4 | \$24,694.0 | \$14,045.9 | \$10,648.1 |
| RL-0041 | B Reactor | \$3,785.0 | \$4,779.2 | \$980.9 | \$3,798.3 |
| SWS | Site-Wide Services | \$219,618.2 | \$179,012.1 | \$138,494.9 | \$40,517.2 |
| Total | | \$351,587.8 | \$275,681.4 | \$205,510.2 | \$70,171.2 |

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.

Based upon FY18 actuals the remaining uncosted carryover balance will fund SWS through August 2, 2018, RL-20 through July 17, 2018, and HAMMER through July 23, 2018.

* Assumes funding through CBAG Rev 5, increase in SWS for Impact Analysis for Air Modeling \$351.4K, and \$1M for HAMMER per FY19 CBAG Rev 6

** Funds received through Contract Modification 713, dated June 18, 2018



3.0 SAFETY PERFORMANCE

During the month of May, MSA experienced one injury that was classified as “Recordable”. To date, the fiscal year total recordable case (TRC) rate is 0.49 and the DART rate is 0.07; both rates are below the EM performance baseline of 1.1 and 0.60, respectively. First Aid cases were slightly above the average for a given month. MSA continues to closely monitor first aid cases to determine emerging trends and implement awareness activities, as warranted.

Seasonal changes will occur within the next few weeks and additional tools and communications are being provided to employees. Historically, First Aid cases increase during the summer months. MSA Issued a Weekly Safety Start which focused on heat stress control, such as proper planning for hot weather and protective measures that can be followed when working in high temperatures.



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

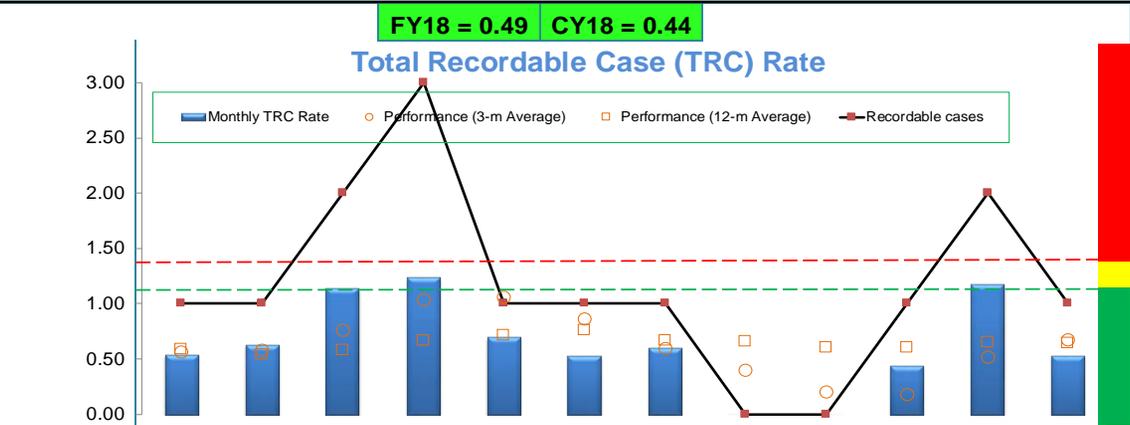
The TRC is measured in accordance with OSHA guidelines for reporting and calculating. The rate is calculated by multiplying the number of Recordable cases by 200,000 and dividing by the total number of work hours.

Performance Thresholds

| | |
|------------|-----------|
| Adverse | > 1.3 |
| Cautionary | 1.1 - 1.3 |
| Meets | < 1.1 |

Performance Data

| | Jun-17 | Jul-17 | Aug-17 | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Monthly Recordable Cases | 1 | 1 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 1 |
| Monthly TRC Rate | 0.53 | 0.62 | 1.13 | 1.23 | 0.69 | 0.52 | 0.60 | 0.00 | 0.00 | 0.43 | 1.17 | 0.53 |
| Performance (3-m Average) | 0.56 | 0.58 | 0.76 | 1.03 | 1.06 | 0.86 | 0.60 | 0.40 | 0.20 | 0.18 | 0.52 | 0.68 |
| Performance (12-m Average) | 0.58 | 0.54 | 0.58 | 0.67 | 0.71 | 0.76 | 0.66 | 0.66 | 0.60 | 0.60 | 0.65 | 0.64 |



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: | 6/7/2018 |

Analysis

During the month of May, one injury was classified as 'Recordable'. The injury occurred when an employee jammed their finger when reaching to open a door.

2018 FYTD Recordable Cases: 7
 2017 FY Recordable Cases: 14 (TRC = 0.67)

- Types of injuries MSA has experienced during FY 2018 that were classified as Recordable:
 - Struck by Object (2), Slip/trip/fall (1), Hearing loss (1), Overexertion (1), Contact: Rub/Abrade (1), Struck against (1)
- Body parts that have been affected:
 - Back (2), Finger (2), Hearing (1), Hand (1), Tooth (1)

Action

Injury Prevention Actions:

- The number of First Aid cases for May was slightly above the average for a given month. 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.
- Issued a Weekly Safety Start which focused on heat stress control, such as proper planning for hot weather and protective measures that can be followed when working in high temperatures.
- Continued to share inspection modules in support of the safety inspection campaign that meets an MSA 2018 Safety Improvement Plan (SIP) goal of improving work area conditions and increasing employee participation in safety & health inspections.
- Issued a Special Safety Bulletin to remind all employees the requirements of easy accessibility to the front of electrical panels; the Integrated Safety Management System (ISMS) Surveillance Team has noted a few occasions where panels have been blocked.

Additional Info

None

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

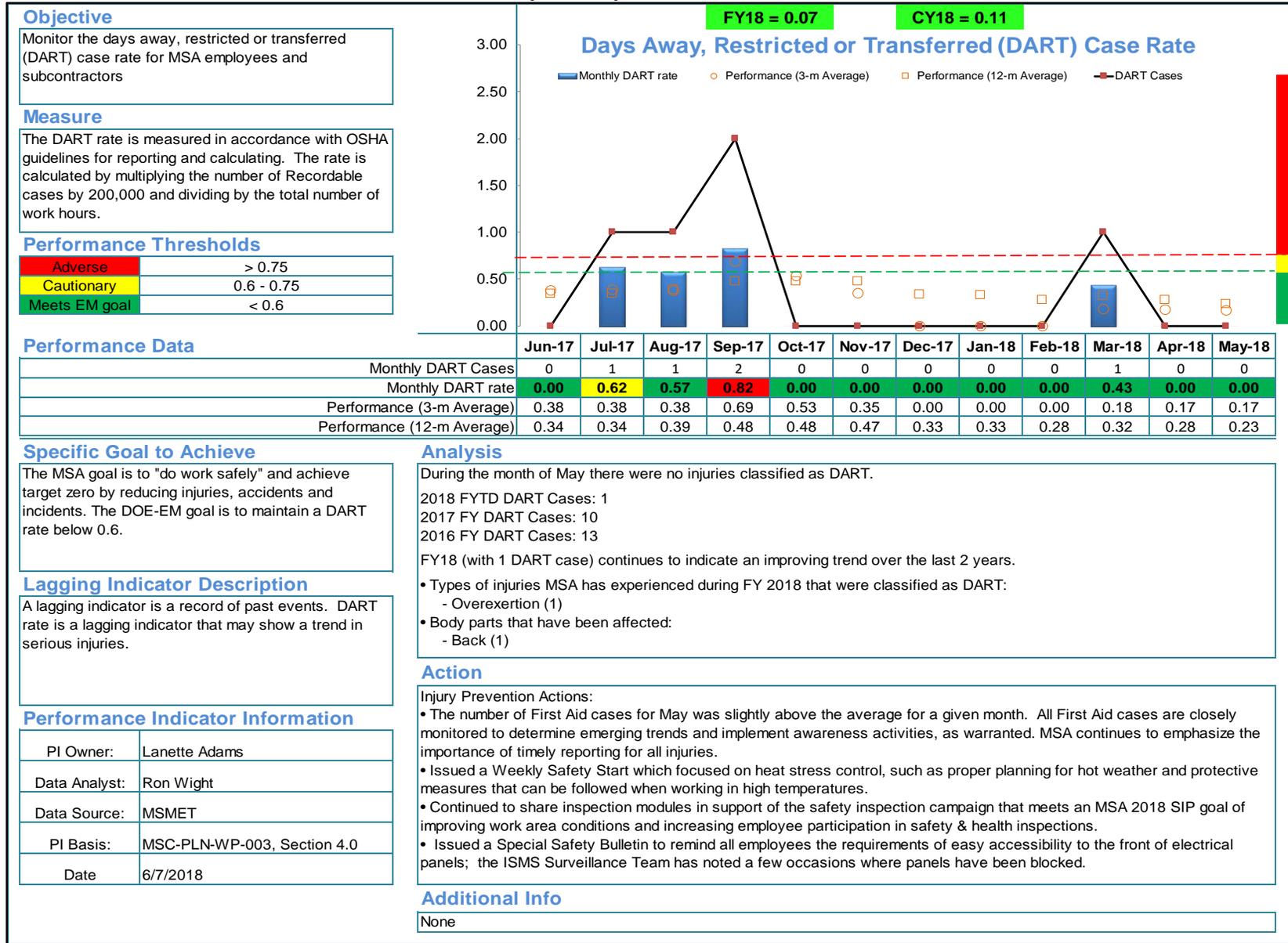




Table 3-3. First-Aid Case Rate

Objective

Monitor the number of First Aid cases and rate as a leading indicator to DART and TRC rates for MSA and subcontractor employees.

Measure

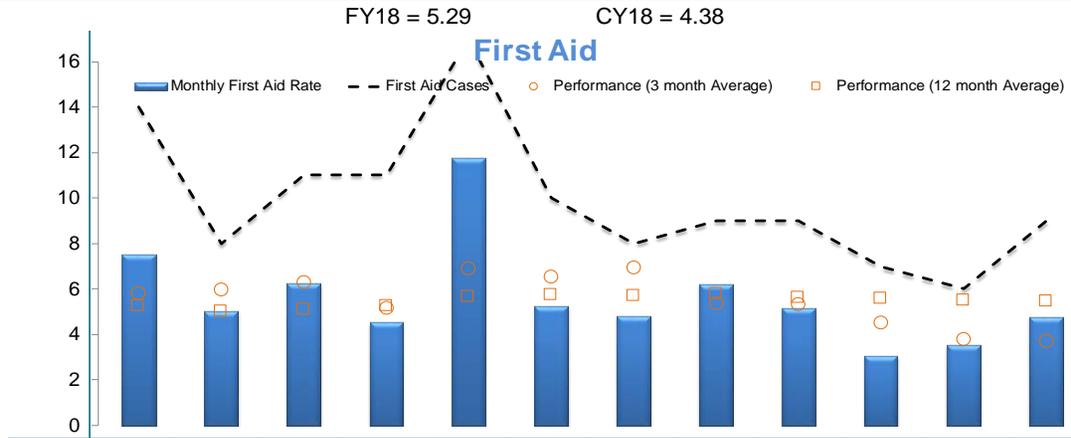
The metric is a count of the number of First Aid cases per month, and the rate of cases. The rate is calculated by multiplying the number of First Aid cases by 200,000 and dividing by the total number of work hours for a given period.

Performance Thresholds

| | |
|-----------|-----|
| Adverse | n/a |
| Declining | n/a |
| Meets | n/a |

Performance Data

| | Jun-17 | Jul-17 | Aug-17 | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| First Aid Cases | 14 | 8 | 11 | 11 | 17 | 10 | 8 | 9 | 9 | 7 | 6 | 9 |
| Monthly First Aid Rate | 7.45 | 4.97 | 6.22 | 4.51 | 11.76 | 5.23 | 4.78 | 6.19 | 5.12 | 3.03 | 3.50 | 4.74 |
| Performance (3 month Average) | 5.81 | 5.96 | 6.28 | 5.16 | 6.90 | 6.56 | 6.95 | 5.36 | 5.32 | 4.53 | 3.80 | 3.71 |
| Performance (12 month Average) | 5.26 | 4.99 | 5.09 | 5.23 | 5.66 | 5.72 | 5.68 | 5.77 | 5.62 | 5.57 | 5.49 | 5.44 |



Specific Goal to Achieve

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

Leading Indicator Description

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

Performance Indicator Information

| | |
|---------------|--------------------------|
| PI Owner: | Lanette Adams |
| Data Analyst: | Ron Wight |
| Data Source: | MSMET |
| PI Basis: | MSC-PLN-WP-003 Sect. 4.0 |
| Date | 6/11/2018 |

Analysis

MSA experienced nine First Aid cases in May. The injuries were caused by the following incidents: two overexertion; four body motion; one slip/trip/fall; and, two struck against.

To date, there is no single cause that has contributed to a majority of the injuries.

- 20% by overexertion, 18% by body motion, 15% from being struck by, 14% by a slip/trip/fall, 15% contact with (rub, abrade), 11% from being struck against, 3% caught in and 3% from contact with an animal.
- 47% arm/hand injuries; 25% leg/foot injuries; 16% head (includes eyes, ears), 7% back.

FY 2018 First Aid Cases: 75
 FY 2017 First Aid Cases: 110, rate = 5.23

Actions

Injury Prevention Actions:

- The number of First Aid cases for May was slightly above the average for a given month. 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.
- Issued a Weekly Safety Start which focused on heat stress control, such as proper planning for hot weather and protective measures that can be followed when working in high temperatures.
- Continued to share inspection modules in support of the safety inspection campaign that meets an MSA 2018 SIP goal of improving work area conditions and increasing employee participation in safety & health inspections.
- Issued a Special Safety Bulletin to remind all employees the requirements of easy accessibility to the front of electrical panels; the ISMS Surveillance Team has noted a few occasions where panels have been blocked.



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

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

| CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE | | | | | | | | | | | | | DOLLARS IN Thousands | | FORM APPROVED OMB No. 0704-0188 | |
|--|--------------------|---|--------------------------------|--|---|-----------------------------------|--|--|---------------|---------------------------------|--------------------------------------|---------------------------|----------------------|--|------------------------------------|--|
| 1. Contractor a. Name Mission Support Alliance b. Location (Address and Zip Code) Richland, WA 99352 | | 2. Contract a. Name Mission Support Contract b. Number RL14728 c. TYPE CPAF | | | 3. Program a. Name Mission Support Contract b. Phase Operations c. EVMS ACCEPTANCE No X Yes | | | 4. Report Period a. From (2018/04/23) b. To (2018/05/27) | | | 5. CONTRACT DATA | | | | | |
| a. QUANTITY N/A | | b. NEGOTIATED COST \$3,542,950 | | c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK \$0 | | d. TARGET PROFIT/FEE \$210,474 | e. TARGET PRICE \$3,753,424 | f. ESTIMATED PRICE \$3,956,855 | | g. CONTRACT CEILING N/A | h. ESTIMATED CONTRACT CEILING N/A | i. DATE OF OTB/OTS 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 | | | \$3,542,950 | | | | c. SIGNATURE | | | d. DATE SIGNED 6/25/18 | | | | | | |
| b. WORST CASE | | | \$3,933,700 | | | | | | | | | | | | | |
| c. MOST LIKELY | | | \$3,746,381 | | 3,542,950 | | (203,431) | | | | | | | | | |
| 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 | 5,264 | 5,264 | 5,852 | 0 | (589) | 502,389 | 502,389 | 520,826 | 0 | (18,438) | 555,338 | 580,075 | (24,737) | | | |
| 3001.01.02 - Fire and Emergency Response | 1,806 | 1,806 | 3,353 | 0 | (1,547) | 187,784 | 187,784 | 216,134 | (0) | (28,349) | 205,941 | 242,099 | (36,159) | | | |
| 3001.01.03 - Emergency Management | 570 | 570 | 392 | 0 | 178 | 41,460 | 41,460 | 39,534 | 0 | 1,926 | 47,199 | 44,884 | 2,314 | | | |
| 3001.01.04 - HAMMER | 289 | 289 | 570 | 0 | (281) | 56,043 | 56,043 | 63,831 | (0) | (7,788) | 58,861 | 68,622 | (9,761) | | | |
| 3001.01.05 - Emergency Services Management | 186 | 186 | 113 | 0 | 73 | 12,791 | 12,791 | 13,410 | (0) | (619) | 14,182 | 15,406 | (1,224) | | | |
| 3001.02.01 - Site-Wide Safety Standards | 35 | 35 | 112 | 0 | (77) | 6,349 | 6,349 | 7,784 | (0) | (1,435) | 6,704 | 8,424 | (1,719) | | | |
| 3001.02.02 - Environmental Integration | 416 | 416 | 391 | 0 | 26 | 49,636 | 49,636 | 50,387 | 0 | (751) | 54,087 | 54,753 | (666) | | | |
| 3001.02.03 - Public Safety & Resource Protection | 1,071 | 1,071 | 848 | 0 | 223 | 60,878 | 60,878 | 60,589 | 0 | 289 | 71,202 | 72,521 | (1,319) | | | |
| 3001.02.04 - Radiological Site Services | 0 | 0 | 35 | 0 | (35) | 4,774 | 4,774 | 5,091 | (0) | (316) | 4,774 | 5,248 | (474) | | | |
| 3001.02.05 - WSCF Analytical Services | 93 | 93 | 0 | 0 | 93 | 51,943 | 51,943 | 50,457 | (0) | 1,487 | 52,864 | 51,063 | 1,801 | | | |
| 3001.03.01 - IM Project Planning & Controls | 236 | 236 | 139 | 0 | 97 | 32,689 | 32,689 | 30,844 | 0 | 1,845 | 35,098 | 33,069 | 2,028 | | | |
| 3001.03.02 - Information Systems | 1,347 | 1,347 | 652 | 0 | 695 | 111,829 | 111,829 | 104,555 | (0) | 7,274 | 125,124 | 120,962 | 4,162 | | | |
| 3001.03.03 - Infrastructure / Cyber Security | 268 | 268 | 428 | 0 | (160) | 33,832 | 33,832 | 35,659 | (0) | (1,827) | 36,546 | 40,597 | (4,051) | | | |
| 3001.03.04 - Content & Records Management | 742 | 742 | 455 | 0 | 287 | 62,799 | 62,799 | 60,599 | 0 | 2,200 | 70,246 | 68,093 | 2,154 | | | |
| 3001.03.05 - IR/CM Management | 112 | 112 | 152 | 0 | (40) | 11,389 | 11,389 | 11,631 | 0 | (242) | 12,516 | 12,862 | (346) | | | |
| 3001.03.06 - Information Support Services | 201 | 201 | 160 | 0 | 41 | 13,122 | 13,122 | 12,484 | 0 | 638 | 15,141 | 14,388 | 753 | | | |
| 3001.04.01 - Roads and Grounds Services | 305 | 305 | 225 | 0 | 80 | 23,850 | 23,850 | 26,168 | 0 | (2,317) | 26,919 | 29,682 | (2,763) | | | |
| 3001.04.02 - Biological Services | 351 | 351 | 379 | 0 | (28) | 31,633 | 31,633 | 32,892 | 0 | (1,259) | 35,173 | 36,652 | (1,479) | | | |
| 3001.04.03 - Electrical Services | 611 | 611 | 1,467 | 0 | (856) | 83,359 | 83,359 | 101,326 | 0 | (17,967) | 89,784 | 111,632 | (21,848) | | | |
| 3001.04.04 - Water/Sewer Services | 732 | 732 | 1,365 | 0 | (633) | 88,862 | 88,862 | 109,598 | (0) | (20,736) | 96,088 | 119,758 | (23,670) | | | |
| 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 | 28 | 0 | (28) | 9,721 | 9,721 | 10,315 | (0) | (594) | 9,721 | 10,443 | (722) | | | |



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 | | a. Name | | | a. Name | | | a. From (2018/04/23) | | | | | | | | |
| Mission Support Alliance | | Mission Support Contract | | | Mission Support Contract | | | | | | | | | | | |
| b. Location (Address and Zip Code) | | b. Number | | | b. Phase | | | b. To (2018/05/27) | | | | | | | | |
| Richland, WA 99352 | | RL14728 | | | Operations | | | | | | | | | | | |
| c. TYPE | | d. Share Ratio | | | c. EVMS ACCEPTANCE | | | | | | | | | | | |
| CPAF | | | | | No X Yes | | | | | | | | | | | |
| Item (1) | Current Period | | | Variance | | Cumulative to Date | | | | | At Completion | | | | | |
| | Budgeted Cost | Actual Cost | Variance | Budgeted Cost | Actual Cost | Variance | Budgeted | Estimated | Variance | | | | | | | |
| Work Scheduled (2) | Work Performed (3) | Actual Cost Work Performed (4) | Schedule (5) | Cost (6) | Work Scheduled (7) | Work Performed (8) | Actual Cost Work Performed (9) | Schedule (10) | Cost (11) | Budgeted (12) | Estimated (13) | Variance (14) | | | | |
| a. WORK BREAKDOWN STRUCTURE ELEMENT (Cont'd) | | | | | | | | | | | | | | | | |
| 3001.04.07 - Fleet Services | 62 | 62 | (0) | 0 | 62 | 8,316 | 8,316 | 7,322 | 0 | 994 | 8,943 | 7,737 | 1,206 | | | |
| 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 | 5 | 0 | (5) | 370 | 370 | 552 | (0) | (182) | 370 | 572 | (202) | | | |
| 3001.04.10 - Technical Services | 321 | 321 | 588 | 0 | (267) | 39,070 | 39,070 | 43,532 | 0 | (4,463) | 42,307 | 48,631 | (6,325) | | | |
| 3001.04.11 - Energy Management | 302 | 302 | 127 | 0 | 175 | 12,453 | 12,453 | 10,091 | (0) | 2,363 | 15,921 | 13,057 | 2,864 | | | |
| 3001.04.12 - Hanford Historic Buildings Preservation | 218 | 218 | 198 | 0 | 20 | 20,083 | 20,083 | 21,895 | 0 | (1,812) | 21,582 | 24,071 | (2,489) | | | |
| 3001.04.13 - Work Management | 107 | 107 | 229 | 0 | (122) | 13,699 | 13,699 | 17,210 | (0) | (3,511) | 14,777 | 18,932 | (4,155) | | | |
| 3001.04.14 - Land and Facilities Management | 701 | 701 | 449 | 0 | 252 | 41,340 | 41,340 | 39,545 | (0) | 1,795 | 48,673 | 47,915 | 758 | | | |
| 3001.04.15 - Mail & Courier | 128 | 128 | 55 | 0 | 74 | 7,303 | 7,303 | 6,346 | (0) | 957 | 8,598 | 7,434 | 1,164 | | | |
| 3001.04.16 - Property Systems/Acquisitons | 590 | 590 | 703 | 0 | (113) | 49,821 | 49,821 | 51,876 | 0 | (2,055) | 55,761 | 58,196 | (2,435) | | | |
| 3001.04.17 - General Supplies Inventory | 14 | 14 | 26 | 0 | (12) | 1,447 | 1,447 | 1,508 | 0 | (61) | 1,587 | 2,184 | (596) | | | |
| 3001.04.18 - Maintenance Management Program Impleme | 211 | 211 | 80 | 0 | 131 | 10,614 | 10,614 | 9,489 | 0 | 1,124 | 12,727 | 11,184 | 1,543 | | | |
| 3001.06.01 - Business Operations | 424 | 424 | 419 | 0 | 5 | 45,731 | 45,731 | 10,981 | 0 | 34,750 | 49,669 | 16,354 | 33,315 | | | |
| 3001.06.02 - Human Resources | 263 | 263 | 299 | 0 | (36) | 22,201 | 22,201 | 21,090 | (0) | 1,111 | 24,844 | 24,283 | 561 | | | |
| 3001.06.03 - Safety, Health & Quality | 1,271 | 1,271 | 1,730 | 0 | (459) | 148,414 | 148,414 | 157,368 | (0) | (8,954) | 161,233 | 172,234 | (11,001) | | | |
| 3001.06.04 - Miscellaneous Support | 778 | 778 | 651 | 0 | 127 | 49,010 | 49,010 | 47,887 | (0) | 1,123 | 56,842 | 55,986 | 857 | | | |
| 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 | 626 | 626 | 534 | 0 | 92 | 57,677 | 57,677 | 54,974 | (0) | 2,702 | 63,971 | 61,394 | 2,576 | | | |
| 3001.08.01 - Water System | 255 | 157 | 257 | (98) | (100) | 29,985 | 29,287 | 16,134 | (698) | 13,153 | 38,563 | 23,425 | 15,138 | | | |
| 3001.08.02 - Sewer System | 1,535 | 1,965 | 1,683 | 430 | 282 | 14,130 | 13,129 | 15,399 | (1,001) | (2,270) | 16,559 | 18,356 | (1,797) | | | |
| 3001.08.03 - Electrical System | 559 | 279 | 264 | (280) | 15 | 17,271 | 17,040 | 17,703 | (230) | (663) | 21,211 | 21,240 | (29) | | | |
| 3001.08.04 - Roads and Grounds | 0 | 0 | 0 | 0 | (0) | 9,137 | 9,137 | 8,533 | (0) | 604 | 9,137 | 8,533 | 604 | | | |
| 3001.08.05 - Facility System | 1,729 | 1,515 | 1,509 | (214) | 5 | 7,836 | 7,816 | 7,621 | (20) | 194 | 10,558 | 10,596 | (38) | | | |
| 3001.08.06 - Reliability Projects Studies & Estimates | 491 | 491 | 558 | 0 | (67) | 12,033 | 12,033 | 14,386 | (0) | (2,353) | 13,952 | 16,275 | (2,323) | | | |
| 3001.08.07 - Reliability Project Spare Parts Inventory | 0 | 0 | 11 | 0 | (11) | 86 | 86 | 2,841 | 0 | (2,755) | 86 | 4,549 | (4,463) | | | |
| 3001.08.08 - Network & Telecommunications System | 19 | 30 | 77 | 10 | (48) | 14,157 | 13,950 | 19,411 | (208) | (5,461) | 14,164 | 19,761 | (5,597) | | | |
| 3001.08.09 - Capital Equipment Not Related to Constructi | 0 | 0 | 0 | 0 | 0 | 11,154 | 11,154 | 10,835 | (0) | 319 | 11,154 | 10,835 | 319 | | | |
| 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 | 53,526 | 54,152 | (627) | | | |
| 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) | | | | | | | | | | | | | | | | |
| | 25,242 | 25,090 | 27,570 | (152) | (2,479) | 2,140,942 | 2,138,784 | 2,198,726 | (2,158) | (59,941) | 2,420,695 | 2,519,206 | (98,512) | | | |

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 (2018/04/23) | | | | | | | | |
| b. Location (Address and Zip Code) Richland, WA 99352 | | b. Number RL14728 | | | b. Phase Operations | | | | b. To (2018/05/27) | | | | | | | | |
| c. TYPE CPAF | | d. Share Ratio | | | c. EVMS ACCEPTANCE No X Yes | | | | | | | | | | | | |
| Item (1) | Current Period | | | | | Cumulative to Date | | | | | At Completion | | | | | | |
| | Budgeted Cost | | Actual Cost Work Performed (4) | Variance | | Budgeted Cost | | Actual Cost Work Performed (9) | Variance | | Budgeted (12) | Estimated (13) | Variance (14) | | | | |
| Work Scheduled (2) | Work Performed (3) | Schedule (5) | | Cost (6) | Work Scheduled (7) | Work Performed (8) | Schedule (10) | | Cost (11) | | | | | | | | |
| a2. WORK BREAKDOWN STRUCTURE ELEMENT | | | | | | | | | | | | | | | | | |
| 3001.01.04 - HAMMER | 843 | 843 | 1,641 | 0 | (798) | 113,595 | 113,595 | 126,205 | 0 | (12,610) | 122,048 | 137,677 | (15,629) | | | | |
| 3001.02.04 - Radiological Site Services | 1,282 | 1,282 | 782 | 0 | 500 | 59,612 | 59,612 | 53,871 | 0 | 5,741 | 72,360 | 65,625 | 6,735 | | | | |
| 3001.02.05 - WSCF Analytical Services | 1,238 | 1,238 | 0 | 0 | 1,238 | 73,020 | 73,020 | 53,176 | 0 | 19,844 | 85,486 | 61,438 | 24,048 | | | | |
| 3001.03.02 - Information Systems | 245 | 245 | 294 | 0 | (50) | 5,440 | 5,440 | 5,683 | 0 | (243) | 7,832 | 8,200 | (368) | | | | |
| 3001.03.04 - Content & Records Management | 86 | 86 | 65 | 0 | 21 | 1,842 | 1,842 | 1,840 | 0 | 2 | 2,636 | 2,616 | 19 | | | | |
| 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 | 2,996 | 2,996 | 5,173 | 0 | (2,177) | 58,542 | 58,542 | 63,618 | 0 | (5,075) | 87,825 | 92,408 | (4,583) | | | | |
| 3001.04.05 - Facility Services | 688 | 688 | 1,022 | 0 | (333) | 62,371 | 62,371 | 70,115 | 0 | (7,744) | 69,235 | 78,578 | (9,344) | | | | |
| 3001.04.06 - Transportation | 187 | 187 | 601 | 0 | (414) | 36,345 | 36,345 | 44,752 | 0 | (8,408) | 38,229 | 48,400 | (10,171) | | | | |
| 3001.04.07 - Fleet Services | 789 | 789 | 1,500 | 0 | (711) | 110,479 | 110,479 | 125,380 | 0 | (14,902) | 118,417 | 136,278 | (17,861) | | | | |
| 3001.04.08 - Crane and Rigging | 986 | 986 | 1,238 | 0 | (252) | 101,400 | 101,400 | 107,237 | 0 | (5,838) | 111,314 | 118,683 | (7,369) | | | | |
| 3001.04.10 - Technical Services | 6 | 6 | 287 | 0 | (282) | 1,109 | 1,109 | 5,372 | 0 | (4,263) | 1,164 | 6,657 | (5,493) | | | | |
| 3001.04.13 - Work Management | 0 | 0 | 51 | 0 | (51) | 2,676 | 2,676 | 3,636 | 0 | (961) | 2,676 | 3,839 | (1,163) | | | | |
| 3001.04.14 - Land and Facilities Management | 726 | 726 | 748 | 0 | (22) | 56,675 | 56,675 | 60,537 | 0 | (3,862) | 63,983 | 68,513 | (4,531) | | | | |
| 3001.04.15 - Mail & Courier | 22 | 22 | 21 | 0 | 1 | 1,417 | 1,417 | 1,429 | 0 | (12) | 1,633 | 1,647 | (14) | | | | |
| 3001.06.01 - Business Operations | 1,019 | 1,019 | 804 | 0 | 215 | 96,664 | 96,664 | 98,634 | 0 | (1,970) | 105,990 | 109,372 | (3,382) | | | | |
| 3001.06.02 - Human Resources | 175 | 175 | 354 | 0 | (179) | 23,304 | 23,304 | 26,626 | 0 | (3,323) | 25,056 | 29,204 | (4,148) | | | | |
| 3001.06.03 - Safety, Health & Quality | 195 | 195 | 179 | 0 | 16 | 12,699 | 12,699 | 13,072 | 0 | (373) | 14,663 | 15,046 | (383) | | | | |
| 3001.06.04 - Miscellaneous Support | 89 | 89 | 143 | 0 | (54) | 12,418 | 12,418 | 14,974 | 0 | (2,556) | 13,314 | 16,610 | (3,297) | | | | |
| 3001.06.05 - Presidents Office (G&A nonPMB) | 365 | 365 | 274 | 0 | 91 | 24,213 | 24,213 | 23,492 | 0 | 721 | 27,878 | 27,284 | 594 | | | | |
| 3001.06.06 - Strategy | 27 | 27 | 26 | 0 | 1 | 2,812 | 2,812 | 2,760 | 0 | 53 | 3,085 | 3,033 | 53 | | | | |
| 3001.A1.01 - Transfer - CHPRC | 6,933 | 6,933 | 6,823 | 0 | 110 | 612,785 | 612,785 | 616,716 | 0 | (3,932) | 681,955 | 687,014 | (5,059) | | | | |
| 3001.A1.02 - Transfer - WRPS | 1,382 | 1,382 | 5,565 | 0 | (4,183) | 196,905 | 196,905 | 263,467 | 0 | (66,562) | 210,754 | 290,188 | (79,434) | | | | |
| 3001.A1.03 - Transfers - FH Closeout | 0 | 0 | 0 | 0 | 0 | 205 | 205 | 228 | 0 | (23) | 209 | 231 | (22) | | | | |
| 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 | 33 | 0 | (33) | 2,800 | 2,800 | 3,111 | 0 | (311) | 2,800 | 3,192 | (392) | | | | |
| 3001.A2.02 - Non Transfer - AMH | 14 | 14 | 0 | 0 | 14 | 1,190 | 1,190 | 954 | 0 | 235 | 1,334 | 1,050 | 284 | | | | |
| 3001.A2.03 - Non Transfer - ATL | 19 | 19 | 0 | 0 | 19 | 1,015 | 1,015 | 702 | 0 | 313 | 1,204 | 827 | 377 | | | | |
| 3001.A2.04 - Non-Transfer - WCH | 357 | 357 | 4 | 0 | 353 | 46,988 | 46,988 | 41,718 | 0 | 5,271 | 50,554 | 44,111 | 6,443 | | | | |
| 3001.A2.05 - Non-Transfers - HPM | 0 | 0 | 51 | 0 | (51) | 1,549 | 1,549 | 2,575 | 0 | (1,026) | 1,549 | 2,840 | (1,291) | | | | |
| 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 | 24 | 0 | (24) | 273 | 273 | 781 | 0 | (509) | 273 | 912 | (640) | | | | |
| 3001.A4.01 - Request for Services | 414 | 414 | 576 | 0 | (162) | 100,055 | 100,055 | 106,642 | 0 | (6,587) | 104,200 | 112,705 | (8,505) | | | | |
| 3001.A4.02 - HAMMER RFSs | 4 | 4 | 242 | 0 | (239) | 26,262 | 26,262 | 32,078 | 0 | (5,817) | 26,297 | 33,201 | (6,903) | | | | |
| 3001.A4.03 - National Guard RFSs | 0 | 0 | 0 | 0 | 0 | 1,552 | 1,552 | 1,550 | 0 | 2 | 1,554 | 1,551 | 3 | | | | |
| 3001.A4.04 - PNNL RFSs | 19 | 19 | 176 | 0 | (157) | 10,051 | 10,051 | 11,698 | 0 | (1,647) | 10,243 | 12,645 | (2,402) | | | | |
| 3001.A5.01 - RL PD | 67 | 67 | 37 | 0 | 30 | 5,927 | 5,927 | 6,136 | 0 | (209) | 6,598 | 6,858 | (260) | | | | |
| 3001.A5.02 - ORP PD | 0 | 0 | 80 | 0 | (80) | 6,463 | 6,463 | 7,667 | 0 | (1,204) | 6,463 | 8,062 | (1,599) | | | | |





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 | | a. Name | | | a. Name | | | a. From (2018/04/23) | | | | | | | | |
| b. Location (Address and Zip Code) | | b. Number | | | b. Phase | | | b. To (2018/05/27) | | | | | | | | |
| c. TYPE | | d. Share Ratio | | | c. EVMS ACCEPTANCE | | | | | | | | | | | |
| 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) | | | | | | |
| 3001.A5.03 - RL Project Funded | 60 | 60 | 296 | 0 | (236) | 3,486 | 3,486 | 9,296 | 0 | (5,810) | 4,039 | 11,258 | (7,219) | | | |
| 3001.A5.04 - ORP Project Funded | 0 | 0 | 116 | 0 | (116) | 1,445 | 1,445 | 4,087 | 0 | (2,642) | 1,445 | 4,953 | (3,508) | | | |
| 3001.A6.01 - Portfolio PMTOs | 42 | 42 | 73 | 0 | (31) | 637 | 637 | 616 | 0 | 21 | 794 | 860 | (66) | | | |
| 3001.A7.01 - G&A Liquidations | (1,909) | (1,909) | (2,528) | 0 | 619 | (174,696) | (174,696) | (187,032) | 0 | 12,336 | (192,858) | (208,868) | 16,010 | | | |
| 3001.A7.02 - DLA Liquidations | (1,214) | (1,214) | (1,906) | 0 | 692 | (106,154) | (106,154) | (121,272) | 0 | 15,118 | (117,860) | (136,460) | 18,601 | | | |
| 3001.A7.03 - Variable Pools Revenue | (8,886) | (8,886) | (9,986) | 0 | 1,100 | (580,865) | (580,865) | (597,447) | 0 | 16,582 | (669,258) | (690,235) | 20,977 | | | |
| 3001.B1.01 - UBS Assessments for Other Providers | 3 | 3 | 0 | 0 | 3 | 46 | 46 | 0 | 0 | 46 | 75 | 0 | 75 | | | |
| 3001.B1.02 - UBS Other MSC - HAMMER M&O | 13 | 13 | 0 | 0 | 13 | 213 | 213 | 0 | 0 | 213 | 347 | 0 | 347 | | | |
| 3001.B1.03 - Assessment for Other Provided Services | 137 | 137 | 0 | 0 | 137 | 2,205 | 2,205 | 0 | 0 | 2,205 | 3,553 | 0 | 3,553 | | | |
| 3001.B1.04 - Assessment for PRC Services to MSC | 75 | 75 | 0 | 0 | 75 | 1,212 | 1,212 | 0 | 0 | 1,212 | 1,966 | 0 | 1,966 | | | |
| 3001.B1.07 - Request for Services | 1 | 1 | 0 | 0 | 1 | 15 | 15 | 0 | 0 | 15 | 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) | 9,495 | 9,495 | 14,879 | 0 | (5,383) | 1,022,252 | 1,022,252 | 1,110,740 | 0 | (88,488) | 1,117,140 | 1,222,059 | (104,919) | | | |
| f. MANAGEMENT RESERVE | | | | | | | | | | | 5,116 | 5,116 | 0 | | | |
| g. TOTAL | 34,737 | 34,586 | 42,448 | (152) | (7,863) | 3,163,194 | 3,161,036 | 3,309,465 | (2,158) | (148,430) | 3,542,950 | 3,746,381 | (203,431) | | | |
| 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 | | | | | | | | | | | | | | | | |
| 1. Contractor | | | 2. Contract | | | 3. Program | | | 4. Report Period | | | | | | | |
| a. Name | | | a. Name | | | a. Name | | | a. From (2018/04/23) | | | | | | | |
| Mission Support Alliance | | | Mission Support Contract | | | Mission Support Contract | | | | | | | | | | |
| b. Location (Address and Zip Code) | | | b. Number | | | b. Phase | | | b. To (2018/05/27) | | | | | | | |
| Richland, WA 99352 | | | RL14728 | | | Operations | | | | | | | | | | |
| c. TYPE | | | d. Share Ratio | | | c. EVMS ACCEPTANCE | | | | | | | | | | |
| CPAF | | | | | | No X Yes | | | | | | | | | | |
| 5. CONTRACT DATA | | | | | | | | | | | | | | | | |
| a. ORIGINAL NEGOTIATED COST | | | | b. NEGOTIATED CONTRACT CHANGES | | c. CURRENT NEGOTIATED COST (a+b) | | d. ESTIMATED COST OF UNAUTHORIZED UNPRICED WORK | | | e. CONTRACT BUDGET BASE (C+D) | | f. TOTAL ALLOCATED BUDGET | | g. DIFFERENCE (E - F) | |
| \$2,854,966 | | | | \$687,984 | | \$3,542,950 | | \$0 | | | \$3,542,950 | | \$3,542,950 | | \$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 | | | | |
| 6. PERFORMANCE DATA | | | | | | | | | | | | | | | | |
| ITEM (1) | BCWS CUMULATIVE TO DATE (2) | BCWS FOR REPORT PERIOD (3) | BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative) | | | | | | | | | | | | | |
| | | | Six Month Forecast By Month | | | | | | | | | | | | UNDISTRIBUTED BUDGET (17) | TOTAL BUDGET (18) |
| | | | Jun FY18 (4) | Jul FY18 (5) | Aug FY18 (6) | Sep FY18 (7) | Oct FY19 (8) | Nov FY19 (9) | Dec FY19 (10) | Jan FY19 (11) | Feb FY19 (12) | Mar FY19 (13) | remaining FY19 (16) | | | |
| a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period) | 2,115,700 | 25,365 | 17,506 | 16,434 | 22,631 | 26,596 | 12,729 | 20,955 | 16,886 | 14,700 | 18,465 | 22,583 | 89,314 | 0 | 2,419,866 | |
| b. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD | 25,242 | (25,365) | 26 | 184 | 548 | 456 | 171 | 36 | (2,177) | 2,195 | 8 | 7 | (502) | 0 | 828 | |
| a. PERFORMANCE MEASUREMENT BASELINE (End of Period) | 2,140,943 | | 17,532 | 16,618 | 23,179 | 27,052 | 12,901 | 20,991 | 14,709 | 16,895 | 18,473 | 22,590 | 88,812 | 0 | 2,420,695 | |



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 (2018/04/23) | | | | | | | | |
| b. Location (Address and Zip Code) Richland, WA 99352 | | b. Number RL14728 | | | b. Phase Operations | | | b. To (2018/05/27) | | | | | | | | |
| 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) | | | | | | | | | | | | | |
| | | | Six Month Forecast By Month | | | | | | | | | | | | UNDISTRIBUTED BUDGET (17) | TOTAL BUDGET (18) |
| | | | Jun FY18 (4) | Jul FY18 (5) | Aug FY18 (6) | Sep FY18 (7) | Oct FY19 (8) | Nov FY19 (9) | Dec FY19 (10) | Jan FY19 (11) | Feb FY19 (12) | Mar FY19 (13) | remaining FY19 (16) | | | |
| a2. NON - PERFORMANCE MEASUREMENT BASELINE (Beginning of Period) | 1,012,756 | 9,495 | 7,081 | 6,901 | 9,248 | 9,036 | 5,374 | 8,922 | 7,308 | 6,306 | 7,924 | 9,583 | 17,191 | 0 | 1,117,125 | |
| b2. BASELINE CHANGES AUTHORIZED DURING REPORT PERIOD | 9,495 | (9,495) | 14 | 0 | 0 | 0 | 0 | 0 | (1,002) | 1,002 | 0 | 0 | 0 | 0 | 14 | |
| a2. NON - PERFORMANCE MEASUREMENT BASELINE (End of Period) | 1,022,252 | | 7,095 | 6,901 | 9,248 | 9,036 | 5,374 | 8,922 | 6,306 | 7,308 | 7,924 | 9,583 | 17,191 | 0 | 1,117,140 | |
| 7. MANAGEMENT RESERVE | | | | | | | | | | | | | | | 5,116 | |
| 8. TOTAL | 3,163,194 | 0 | 24,628 | 23,518 | 32,427 | 36,088 | 18,274 | 29,913 | 21,015 | 24,203 | 26,397 | 32,174 | 106,003 | 0 | 3,542,950 | |



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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | 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 – Unfavorable CM CV is primarily due to implementation of the Graded Security Protection Policy that significantly increased manpower requirements and the bid assumption that the Spent Nuclear Material (SNM) would be shipped off the Hanford site by year 3. This policy was subsequent to the MSA baseline proposal and implementation.

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

3001.01.04 HAMMER – Unfavorable CM CV is primarily due to the assumption that less Environmental Management (EM) funding would be required because HAMMER could self-fund itself by performing enough services for non-Hanford entities. This assumption that was included in the proposal has not occurred. As a result, the EM budget will remain lower than the EM funds authorized. This divergent situation has remained and will continue to increase. Services delivered at HAMMER have not been adversely affected because the services are executed consistent with the approved IIP scope.

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

3001.03.04 Content & Records Management – Favorable CM CV is primarily due to savings from self-performance of inventory records.

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

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



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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |

3001.04.10 Technical Services – Unfavorable CM CV is primarily due to the IIP scope and approved funding increases in Compliance & Risk Management and Site Services Program Management. Since fiscal year (FY) IIP/funding authorizations adjust for these differences, no mitigations are planned at this time.

3001.04.14 Land and Facilities Management – Favorable CM CV is due to current month costs being lower than expected because of a late start on conditional assessments of roof inspections.

3001.06.03 Safety, Health & Quality – Unfavorable CM CV is primarily due to the IIP scope and approved funding increases in Radiation Protection and Worker Safety & Health. Since FY IIP/funding authorizations adjust for these differences, no mitigations are planned at this time.

3001.08.02 Sewer System – Favorable CM CV is due to L-854 “200E Sewer Consolidations“ because the fixed price contract was awarded at a lower value than planned.

Variable Service Pools - Non-PMB – The WBS elements 3001.01.04 – 3001.06.06 represents the usage-based pool, General and Administrative (G&A), and Direct Labor Adder (DLA) accounts which were offset by the liquidation of service to customers as identified 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 2018 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 on L-849 “Replace 200E 1.1M-gal PW Tank” and L-850 “Replace 200W 1.1-gal PW Tank” are due to additional analysis of Central Plateau fire water needs which delayed the design process. Efficiencies are anticipated in the remaining design and construction installation periods and may result in some schedule recovery.



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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |
| <p>3001.08.02 Sewer System - Favorable CM SV is due to L-853 "200E Sewer Flow Equalization Facility" delays in major procurements of lift station components, pumps, and structures. The SV is forecast to be recoverable in FY 2018 when the contractor is released to procure major components and they are received on site.</p> <p>3001.08.03 Electrical System – Unfavorable CM SV is because the majority of work for L-815 "Upgrade Transmission/Distribution Access Roads" was performed ahead of schedule.</p> <p>3001.08.05 Facility System – Unfavorable CM SV is due to prior month's early completion of inspection/receipt of the building procured through Garco Building Systems for S-245 "Live Fire Shoot House".</p> <p>Impacts – Current Month Schedule Variance: Impacts are minimal because each Reliability Project is an independent stand-alone project.</p> <p>Corrective Action – Current Month Schedule Variance: None.</p> <p>Cumulative Cost Variance: Several key areas contributing to the cumulative-to-date CV (CTD CV) are as follows:</p> <p>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 also 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 investment plan scope being divergent from the baseline for FY 2017 and FY 2018.</p> <p>Labor and Pension costs: After the original submittal of the forward pricing rates (FPR), it was determined that MSA had incorrectly factored the cost of the Hanford Site Pension Plan (HSPP) and the Hanford Employee Welfare Trust (HEWT) into the labor rates. This was disclosed to MSA in the Source Selection Evaluations Board's (SEB) Debrief of the Mission Support Contract (MSC) in May 2009. MSA received contract modifications associated with pension cost and labor adder adjustments for FY 2009 through FY 2016 that increased the contract value. At the request of RL, the labor and pension proposals are submitted annually at fiscal year-end. The FY 2017 Pension Proposal has been completed and submitted. The 2017 Labor Adder Proposal has not been submitted pending an internal decision to submit it individually or as part of the FY 2017 request for equitable adjustment (REA). The FY 2018 variances associated with labor and pension will continue to grow during the FY.</p> <p>3001.01.01 Safeguards and Security: Unfavorable CTD CV is primarily due to differences in the baseline budgeting and FY IIP</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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |

implemented at a reduced cost and the bid assumption that Spent Nuclear Material (SNM) would be shipped 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 that multiple fire stations would have been closed. Since FY IIP/funding authorizations adjust for these differences, no mitigating actions are needed at this time to reduce the overall CV.

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. As a result of this inaccurate assumption, the EM budget will remain lower than the EM funds authorized. Because of this divergent situation, the CTD CV will continue to increase. Services delivered at HAMMER will not be adversely affected because the services are executed consistent with the approved FY IIP/funding. No other potential contributing performance issues were identified.

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

3001.04.03/04 Electrical/Water and Sewer Services: Unfavorable CTD CV is primarily due to the aging life of the infrastructure on the Hanford Site. More staffing and material procurements than were included in the baseline have been authorized through the FY IIP/funding process. These changes have resulted in increased costs for infrastructure repairs, compliance issues, and maintenance activities. In addition, an EMP has been established to better predict future system failures and predictive maintenance is replacing the preventative maintenance method. Since FY IIP/funding authorizations adjust for these differences, no mitigations are planned at this time.

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

3001.06.03 Safety, Health and Quality: Unfavorable CTD CV is primarily due to the IIP scope and approved funding increases in Radiation Protection, Worker Safety & Health and Beryllium accounts. Since FY IIP/funding authorizations adjust for these differences, no mitigations are planned at this time.



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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |

construction cost savings is attributable to the contractor's expertise in this type of construction and significantly less difficult site conditions encountered than were assumed when preparing the initial cost estimate. Projects L-399 "T-Plant Potable & Raw Water Line Rest" and L-311 "200W Raw Water Reservoir Refurbish" also contributed to this favorable variance because the annual IIP process authorized less funding than planned in the baseline. Project L-419 "Line Renovation/Replacement from 2901U to 200E" had a fixed price contract which was awarded/completed at a lower cost than budgeted.

3001.08.08 Network & Telecommunication Systems: Unfavorable CTD CV is primarily due to approved funding authorizations for the L-713 "Records Storage Facility", ET51 "HLAN Phase 2 Network expansion" and ET60 "Enterprise VoIP Solution Implementation" scope that are divergent from the baseline.

3001.A1 – 3001.B1 Non-PMB: Unfavorable CTD CV is primarily due to other Hanford contractors and government agencies requesting more usage-based services (i.e., Training, Crane & Rigging, Fleet Services, Occupancy, etc.) than planned in the baseline. Since this work scope is providing services as requested, and is fully authorized through the ICWO/RFS process, no mitigations are planned 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 which are offset by the liquidation of services to customers as identified with 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. Because the work scope is primarily level of effort, the CTD CV is not a predictive indicator for future performance. The amount of support provided in the future will be dependent upon the RL approved funding and priority list scope.

Corrective Action - Cumulative Cost Variance:

For FY 2009 – FY 2016, MSA has incorporated negotiated contract variance proposals into the contract baseline. For FY 2017 and FY 2018, MSA will continue to monitor the delta values between the contract baseline and RL funding values to determine if change proposals are warranted. Until then, the divergent data will continue. Note, the FY 2009 through FY 2016 proposals excluded WBS 3001.08, Infrastructure Reliability Projects.



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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |
| <p>Cumulative Schedule Variance:</p> <p>3001.08.01 Water System – Unfavorable CTD SV on L-895 “Fire Water Protection Infrastructure for PRW”, L-850 “Replace 200W 1.1M-gal PW Tank” and L-849 “Replace 200E 1.1M-gal PW Tank” are due to additional analysis of Central Plateau fire water needs which delayed the design process; however, efficiencies are anticipated in the remaining design and construction installation periods which may result in schedule recovery.</p> <p>3001.08.02 Sewer System – Unfavorable CTD SV on projects L-854 “200E Sewer Consolidations” and L-853 “200E Sewer Flow Equalization Facility” is due to delays in major procurement of the lift station components/pumps/structures. SV is forecast to be recovered when the subcontractor is released to perform the procurement phase.</p> <p>3001.08.03 Electrical System – Unfavorable CTD SV is primarily because the cultural resource review (CRR) clearance letter for 200 West Area was issued four months behind schedule. As a result, the start of Task 2 Testing and Treating of wood poles for L-789 “Prioritize T&D Sys Wood PP Test & Replace” was delayed. In addition, the subcontractor required four weeks after notification to re-mobilize their trained forces to Hanford. Task 2 is expected to complete in FY18 despite a net 11 day slip in final completion.</p> <p>3001.08.08 Network and Telecommunications System – Unfavorable CTD SV on ET51 “HLAN Network Upgrade – Phase 2A” is due to network switch issues causing additional design, re-procurement and slowing installation of network switches. Network switch technical issues have now been resolved. Baseline Change Request is in process for the implementation of realized risks.</p> <p>Impacts - Cumulative Schedule Variance: Impacts to Reliability Projects are minimal because each is an independent stand-alone project.</p> <p>Corrective Action – Cumulative Schedule Variance: No corrective action is required because each project is stand-alone.</p> <p>Variance at Complete:</p> <p>During October of 2011, MSA completed re-aligning the baseline to the negotiated contract, and using the approved change control process, implemented the re-aligned baseline data. RL provided approval of the baseline data for reporting progress and also provided an approved and funded priority list of items for MSA work scope. The VAC is primarily due to the RL approved funding and priority list scope being divergent from the baseline for FY2017 and FY 2018.</p> <p>After the original submittal of the FPR, it was determined that MSA had incorrectly factored the cost of the Hanford Site Pension Plan (HSPP) and the Hanford Employee Welfare Trust (HEWT) into the labor rates. This was disclosed to MSA in the Source Selection</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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |

Evaluations Board’s (SEB) Debrief of the Mission Support Contract (MSC) in May 2009. MSA received contract modifications associated with pension cost and labor adder adjustments for FY 2009 through FY 2016 which increased the contract value. At the request of RL, the labor and pension proposals are submitted annually at fiscal year-end.

The FY 2017 Pension Proposal has been completed and submitted. The 2017 Labor Adder Proposal has been completed but not submitted pending an internal decision to submit it individually or as part of the FY 2017 REA. The FY 2018 variances associated with labor and pension will grow during this FY.

Impacts – At Complete Variance:

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

Corrective Action - At Complete Variance:

For FY 2009 – FY 2016, MSA has incorporated negotiated contract variance proposals into the contract baseline. For FY 2017 and FY 2018, MSA will continue to monitor the delta values between the contract baseline and RL funding values to determine if change proposals are warranted. Until then, the divergent data will continue. Note, the FY 2009 through FY 2016 proposals excluded WBS 3001.08, Infrastructure Reliability Projects.

Negotiated Contract Changes:

The Negotiated Contract Cost for May 2018 changed from \$3,542.6M to \$3,542.9M due to the following contract modifications:

- VMSA-18-014 – Mod 698 – Definitization of Access to & Ownership of Records Proposal and Fee
- VPMTO-18-002, Rev 1 – Mod 697 – PMTO-18-002 Plutonium Finishing Plant Expert Panel Extends Period of Performance and Increases Budget.

Changes in Estimated Cost of Authorized Unpriced Work:

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



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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |

Changes in Estimated Price:

The Estimated Price of \$3,956.8M is based on the Most Likely Management Estimate at Completion (MEAC) of \$3,746.3M and fee of \$210.5M. 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 were implemented for the Cost Variance Contract Modifications received for FY 2009 thru FY 2012 in January 2015. BCRs were implemented for the Cost Variance Contract Modifications received for FY 2013 - FY 2016 in March 2018 that increased the negotiated contract costs. Since the FY 2017 funding was higher than the Contract Budget Base by more than the 10% threshold from Section B.5 of the MSA contract, a request for equitable adjustment is anticipated for FY 2017. Since FY 2018 funding is higher than the Contract Budget Base, it is also expected that the FY 2018 variance may exceed the 10% threshold.

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 \$4M from \$3,742.3M to \$3,746.3; \$5.6M increase in the Performance Measurement Baseline (PMB), \$1.1M decrease in the non-PMB, and \$0.5M decrease in management reserve. The PMB increases are primarily the result of CBAG Rev 5 direction to work fiscal year 2018 unfunded scope and management reserve for Reliability Projects. The Non-PMB EAC decrease was primarily because the Training pool had a liquidation increase due to prior unbilled revenue which posted in May. The overall labor rate reduction which was implemented in May, resulted in reduced costs for UBS, and a subsequent increased EAC over liquidation. The decrease in management reserve was risk based for Reliability Project S-245 New Live Fire Shoot House.

Changes in Undistributed Budget:

The Undistributed Budget of \$0M did not change this reporting period.

Changes in Management Reserve:

The Management Reserve for April decreased from \$5.6M to \$5.1M due to the following BCRs related to Reliability Projects, but did not change the contract value:

- VMSA-18-004, Rev 1 – Move Budget to S-245 from Management Reserve for Realized Risk & Re-Plan Construction Schedule



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 (2018/04/23) |
| b. Location (Address and Zip Code) Richland, WA 99352 | b. Number - RL14728 | | b. Phase - Operations | b. To (2018/05/27) |
| | c. Type CPAF | d. Share Ratio | c. EVMS Acceptance NO X YES | |
| 5. Evaluation | | | | |

Differences in the Performance Measurement Baseline:

This reporting period the Performance Measurement Baseline increased \$0.8M from \$2,419.9M to \$2,420.7M. This change is related to management reserve and a contract modification in the following BCRs:

- VMSA-18-014 –Mod 698 – Definitization of Access to & Ownership of Records Proposal and Fee
- VMSA-18-004, Rev 1 – Move Budget to S-245 from Management Reserve for Realized Risk & Re-Plan Construction Schedule

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

- VRL0201RP-18-020 – Create Two Level 5 WBSs for Reliability Project FY 2018 Planning Packages and Move Budget from the FY 2019 Reliability Project Out Year Planning Package
- VRL0201RP-18-021 – Create One Level 4 and Three Level 5 WBSs for L-796 and Move Budget for Design and Construction from Reliability Projects Out Year Planning

Differences in the Non - Performance Measurement Baseline:

This reporting period the non - Performance Measurement Baseline remained at \$1,117.1M with a slight increase due to the following BCR:

- VPMTO-18-002 Rev 1 – Mod 697 – PMTO-18-002 Plutonium Finishing Plant Expert Panel Extends Period of Performance and Increases Budget

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 management reserve. The Worst Case Scenario assumes a 5 percent increase to the Most Likely MEAC case scenario.

7.0 USAGE-BASED SERVICES/DIRECT LABOR ADDER SUMMARY

The Direct Labor Adder (DLA) collects the cost of centralized management, support from others, craft indirect time, and non-labor cost such as training and facilities. These costs are distributed via a rate on direct labor. Usage-Based Services (UBS) are services liquidated to customers (internal and external). The UBS cost is associated with a service and distributed on a unit rate to the customer based upon requests (“pay by the drink”).

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

| Fiscal Year 2018 to Date – May 2018 | | | | | |
|--|-------------------|-------------------|-------------------|-------------------|---------------------|
| Account Description | BCWS | BCWP | ACWP | CV | Liquidation |
| Direct Labor Adder | | | | | |
| Software Engineer Services DLA (3001.03.02.03) | \$1,155.7 | \$1,155.7 | \$1,695.6 | (\$539.9) | (\$1,768.8) |
| Content & Records Management DLA (3001.03.01.04) | \$426.2 | \$426.2 | \$539.7 | (\$113.5) | (\$517.5) |
| Transportation DLA (3001.04.06.02) | \$14,572.1 | \$14,572.1 | \$4,358.8 | \$10,213.3 | (\$4,223.7) |
| Maintenance DLA (3001.04.05.02) | \$9,486.2 | \$9,486.2 | \$7,027.0 | \$2,459.2 | (\$6,732.8) |
| Janitorial Services DLA (3001.04.05.03) | (\$1,151.6) | (\$1,151.6) | \$851.0 | (\$2,002.6) | (\$790.2) |
| Total Direct Labor Adder | \$24,488.6 | \$24,488.6 | \$14,472.1 | \$10,016.5 | (\$14,033.0) |

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.



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

| Fiscal Year 2018 to Date – May 2018 | | | | | |
|---|-------------------|-------------------|-------------------|---------------------|---------------------|
| Account Description | BCWS | BCWP | ACWP | CV | Liquidation |
| Usage Based Services | | | | | |
| Training (3001.01.04.02) | \$3,656.6 | \$3,656.6 | \$11,581.0 | (\$7,924.4) | (\$11,658.1) |
| HRIP (3001.02.04.02) | (\$4,517.2) | (\$4,517.2) | \$2,889.5 | (\$7,406.7) | (\$2,955.8) |
| Dosimetry (3001.02.04.03) | (\$2,522.4) | (\$2,522.4) | \$3,486.7 | (\$6,009.1) | (\$3,781.1) |
| Information Technology Services (3001.03.07.01) | \$18,353.1 | \$18,353.1 | \$22,066.4 | (\$3,713.3) | (\$21,135.5) |
| Work Management (3001.04.13.01) | \$2,080.9 | \$2,080.9 | \$407.1 | \$1,673.8 | (\$397.3) |
| Courier Services (3001.04.15.02) | \$146.7 | \$146.7 | \$153.2 | (\$6.5) | (\$152.5) |
| Occupancy (3001.04.14.06) | \$2,688.8 | \$2,688.8 | \$6,359.4 | (\$3,670.6) | (\$6,178.2) |
| Crane & Rigging (3001.04.08.02) | \$9,987.8 | \$9,987.8 | \$8,609.8 | \$1,378.0 | (\$8,201.2) |
| Guzzler Trucks (3001.04.06.03) | \$127.2 | \$127.2 | \$- | \$127.2 | \$- |
| Fleet (3001.04.07.02) | \$19,599.5 | \$19,599.5 | \$11,092.2 | \$8,507.3 | (\$11,243.2) |
| Total UBS | \$49,601.0 | \$49,601.0 | \$66,645.3 | (\$17,044.3) | (\$65,702.9) |
| Total DLA / UBS | \$74,089.6 | \$74,089.6 | \$81,117.4 | (\$7,027.8) | (\$79,735.9) |

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 Variance – (\$7.0M) Due to the March '18 implementation of the FY13-16 Cost Variance proposal point adjustment impact to the BCWS, the budget baselines of a number of accounts including Training, HRIP, Janitorial Services, Dosimetry, and Occupancy received large credits to the BCWS in March. The resultant net effect of all of the UBS/DLA accounts is a (\$7.0M) overrun.



8.0 RELIABILITY PROJECT STATUS

Activity in May was centered on continuing progress on projects carried over from FY 2017. (Table 8-1 below.)

Table 8-1. Current Active Reliability Projects Summary

| Work Scope Description (Reliability Projects) | Projects to be Completed (\$000's) | | | | | | | | | | | | | | | |
|--|------------------------------------|-----------------|-----------------|------------------|----------------|------------|------------|------------|-------------------|-----------------|----------------|------------|----------------|---------------|----------------------|----------|
| | Contract to Date - Performance | | | | | | | | Project Lifecycle | | | | Complete Dates | | | VAC Cost |
| | BCWS | BCWP | ACWP | SV | CV | SPI | CPI | CSPI | BAC | EAC | VAC | % Complete | Complete Date | Forecast Date | Schedule at Complete | |
| L-850, Replace 200W 1.1M-gal PW Tank | 315.1 | 72.3 | 222.1 | (242.9) | (149.8) | 0.2 | 0.3 | 0.3 | 778.1 | 445.1 | 333.0 | 9.3% | 11/5/18 | 2/26/19 | R | G |
| L-849, Replace 200E 1.1M-gal PW Tank | 304.3 | 61.4 | 97.9 | (242.9) | (36.5) | 0.2 | 0.6 | 0.4 | 767.3 | 530.6 | 236.7 | 8.0% | 11/5/18 | 2/26/19 | R | G |
| L-894, Raw Water Cross Connection Isolation 200E/W | 1,411.3 | 1,429.0 | 908.7 | 17.8 | 520.4 | 1.0 | 1.6 | 1.3 | 7,669.1 | 5,980.1 | 1,689.0 | 18.6% | 5/23/19 | 6/24/19 | R | G |
| L-895, Fire Protection Infrastructure for Plateau Raw Water | 918.2 | 771.7 | 604.1 | (146.5) | 167.6 | 0.8 | 1.3 | 1.1 | 977.0 | 780.6 | 196.4 | 79.0% | 7/2/18 | 8/9/18 | R | G |
| L-357, Replace 12" Potable Water Line to 222-S Lab | 332.4 | 284.6 | 215.2 | (47.7) | 69.4 | 0.9 | 1.3 | 1.1 | 1,654.4 | 1,577.5 | 76.9 | 17.2% | 1/3/19 | 2/27/19 | R | G |
| L-897, Central Plateau Water Treatment Facility | 717.9 | 682.1 | 298.2 | (35.7) | 384.0 | 1.0 | 2.3 | 1.6 | 731.9 | 323.4 | 408.5 | 93.2% | 6/18/18 | 8/30/18 | R | G |
| L-853, 200E Sewer Flow Equalization Facility | 5,175.2 | 4,987.7 | 4,423.5 | (187.5) | 564.3 | 1.0 | 1.1 | 1.0 | 5,713.2 | 5,128.1 | 585.1 | 87.3% | 1/28/19 | 1/28/19 | G | G |
| L-854, 200E Sewer Consolidations | 3,653.9 | 2,839.8 | 2,475.3 | (814.0) | 364.6 | 0.8 | 1.1 | 1.0 | 5,544.3 | 4,727.5 | 816.8 | 51.2% | 1/8/19 | 1/8/19 | G | G |
| L-789, Prioritize T&D Sys Wood PP Test & Replace | 1,103.9 | 1,023.2 | 1,012.0 | (80.7) | 11.2 | 0.9 | 1.0 | 1.0 | 3,779.1 | 3,686.6 | 92.5 | 27.1% | 5/23/19 | 6/13/19 | Y | G |
| L-815, Upgrade Transmission/Distrib Access Rds | 955.8 | 914.1 | 656.2 | (41.7) | 257.9 | 1.0 | 1.4 | 1.2 | 1,356.0 | 989.1 | 366.9 | 67.4% | 9/18/18 | 9/18/18 | G | G |
| L-612, 230kV Transmission System Reconditioning and Sustainability Repairs | 1,190.7 | 1,136.1 | 852.3 | (54.6) | 283.8 | 1.0 | 1.3 | 1.1 | 1,562.4 | 1,101.7 | 460.7 | 72.7% | 5/23/19 | 11/19/20 | R | G |
| L-791, RFL Transfer Trip Upgrades | 53.4 | 0.0 | 13.1 | (53.4) | (13.1) | 0.0 | 0.0 | 0.0 | 340.0 | 293.2 | 46.8 | 0.0% | 9/25/18 | 10/16/18 | Y | G |
| L-888, 400 Area Fire Station | 22.2 | 2.7 | 10.7 | (19.5) | (8.1) | 0.1 | 0.2 | 0.2 | 1,031.0 | 1,002.7 | 28.3 | 0.3% | 4/18/19 | 4/17/19 | G | G |
| S-245, Live Fire Shoot House | 2,202.5 | 2,201.8 | 1,959.4 | (0.7) | 242.4 | 1.0 | 1.1 | 1.1 | 3,653.2 | 3,679.8 | (26.5) | 60.3% | 10/10/18 | 10/10/18 | G | G |
| ET51, HLAN Network Upgrade - Phase 2A | 2,954.4 | 2,746.3 | 2,819.6 | (208.1) | (73.3) | 0.9 | 1.0 | 1.0 | 2,961.2 | 3,170.2 | (209.0) | 92.7% | 6/19/18 | 9/19/18 | R | Y |
| Total | 21,311.0 | 19,152.9 | 16,568.3 | (2,158.1) | 2,584.6 | 0.9 | 1.2 | 1.0 | 38,518.1 | 33,416.1 | 5,102.0 | | | | | |

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





RELIABILITY STATUS, CONT.

Reliability Projects Variance Explanations

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

- *L-850, Replace 200W 1.1M-gal PW Tank:* Unfavorable SV is due to additional analysis of fire water demands on the Central Plateau, which delayed design progress. Currently, the potential to recover SV over the remaining duration of the project is being evaluated.
- *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, the potential to recover SV over the remaining duration of the project is being evaluated.
- *L-895, Fire Protection Infrastructure for Plateau Raw Water:* Unfavorable SV is due to additional analysis of fire water demands for the Central Plateau, which delayed progress on design activities. A resolution was achieved in prior months, and it is now anticipated that substantial recovery of this SV will occur over the remainder of FY 2018 design activities, and construction activities in FY 2019.
- *L-853, 200E Sewer Flow Equalization Facility:* Unfavorable SV is due to delays in major procurements of lift station components, pumps, and structures. The SV is forecast to be recoverable in FY 2018 when the contractor is released to procure major components and they are received on site.
- *L-854, 200E Sewer Consolidations:* Unfavorable SV is due to the late construction subcontract award which delayed construction activities, and caused delays in major procurements of lift station components, pumps, and structures. SV is forecast to be recovered when the contractor is released to procure major components and install the structures on site.
- *L-789, Prioritize T&D Sys Wood PP Test & Replace:* Unfavorable SV is due to the delayed start of Task 2 field activities. The Task 2 SV is unrecoverable due to late delivery of the Cultural Resource Review (CRR) clearance letter, which delayed the field work start date. In addition, the test and treat contractor required four-weeks after notification to re-mobilize their trained forces to Hanford. The Task 2 SV is likely to be unrecoverable due to late delivery of the CRR clearance letters that pushed the field work start date; however, Task 2 is still expected to complete in FY 2018.



- L-791, *RFL Transfer Trip Upgrades*: Unfavorable SV is due to a change in the plan of execution almost immediately following the design BCR. The plan, moving forward in the next Baseline Change Request (BCR), will push early procurement of relays, and development of relay Field Modification Packages (FMPs) out into May of 2021. The lack of performance against these activities has created the majority of the unfavorable schedule variance. In addition, design and support work were performed per plan, but were not reported (estimated ~\$15K in BCWP).
- L-612, *230kV Transmission System Reconditioning and Sustainability Repairs*: Unfavorable SV is due to a delay in approval of the Environmental Assessment/Finding of No Significant Impact (FONSI). This has impacted the start of definitive design. Lack of a detailed schedule from the Bonneville Power Administration (BPA) will continue to impact the schedule moving forward.
- ET51, *HLAN Network Upgrade – Phase 2A*: The unfavorable SV is tied to both procurement and construction as follows:
 - Variance associated with procurement - The current period reporting includes schedule variance of (\$-26.2K) for material procurement.
 - Variance associated with construction - The variance associated with construction (-\$189.1K) is not recoverable. Installation is behind schedule due to issues with network switches experienced in the first few months of the project.

CTD Cost Variances (CV):

- L-850, *Replace 200W 1.1M-gal PW Tank*: Unfavorable CV is due to a previous FY 2016 cost overrun from additional labor expended in identifying the basis for tank size. Cost may be recoverable dependent upon current performance and contract award amounts for design and construction services.
- 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, and realizing cost efficiencies through the design procurement method. The remainder is due to MSA labor support efficiencies.
- L-895, *Fire Protection Infrastructure for Plateau Raw Water*: Favorable CV is primarily attributable to realized cost efficiencies associated with the design procurement method (\$78.9K for Conceptual) and various underruns in project support costs.
- L-357, *Replace 12" Potable Water Line to 222-S Lab*: Favorable CV is due to efficiencies in both subcontractor design efforts in development of the 30% and 90% design, and



project support. Efficiencies are associated with upfront planning performed by the engineering project support team. These efficiencies included pre-conceptual line routing and clarifying operational requirements. Also, early communications and cooperation with other Hanford contractors by the integrated project team (IPT) addressing concerns/design inputs to reduce potential rework.

- *L-897, Central Plateau Water Treatment Facility:* Favorable CV is due to the conceptual design contract awarded for less than baseline value, with efficiencies gained from design subcontractors' experience and ability to self-perform all scope without sub-tiers' support. Additionally, various internal MSA labor efficiencies have been realized, comprising the remainder of the favorable variance.
- *L-853, 200E Sewer Flow Equalization Facility:* Favorable CV is due to efficiencies in project support, and because the fixed price subcontract was awarded under budget. The favorable cost variance is forecast to remain unless major risks are realized and are funds-managed.
- *L-854, 200E Sewer Consolidations:* Favorable CV is due to efficiencies in project support, and because the fixed price subcontract was awarded under budget. The favorable cost variance is forecast to remain unless major risks are realized and are funds-managed.
- *L-815, Upgrade Transmission/Distrib Access Rds:* Favorable CV is due to efficiencies (such as a short-haul from the stockpile) that have been realized and are drivers for the positive cost variance. Additionally, less crushed rock than estimated was needed, and resulted in ~\$75K savings.
- *L-612, 230kV Transmission System Reconditioning and Sustainability Repairs:* Favorable CV is due to the subcontracted conceptual design completing with a significant favorable cost variance. However, the delay of the Memorandum of Agreement (MOA) has delayed the start of definitive design. The Project is incurring unplanned cost, (\$8-\$10K per month), to respond to National Environmental Policy Act and National Historic Preservation Act issues. A BCR will be processed upon approval of the MOA and start of the BPA definitive design to bring both cost and schedule in line with BPA schedules for both activities.
- *S-245, Live Fire Shoot House:* Favorable CV is due to minor efficiencies in subcontractor efforts and cost savings on the building (environmental enclosure) purchased through Garco Building Systems.
- *ET51, HLAN Network Upgrade – Phase 2A:* Unfavorable CV is due to the additional investment of resources focused on correcting problems with the network switches.



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

- L-850, *Replace 200W 1.1M-gal PW Tank*: Favorable VAC is due to the Engineering Design subcontract awarded at favorable cost value, lower than the budgeted amount.
- L-849, *Replace 200E 1.1M-gal PW Tank*: Favorable VAC is due to the Engineering Design subcontract awarded at favorable cost value, lower than the budgeted amount.
- 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, as well as existing underruns through the design phase.
- L-895, *Fire Protection Infrastructure for Plateau Raw Water*: Favorable VAC is due to accumulated design costs less than anticipated as a result of efficiencies gained through the design procurement method, and various other underruns in labor hours for MSA project support personnel. Future VAC may be reduced as additional funds are spent on labor to expedite final design deliverables.
- L-357, *Replace 12" Potable Water Line to 222-S Lab*: Favorable VAC is due to efficiencies in subcontractor design efforts in development of the 30% and 90% design (\$64.9K) and project support (\$12.0K). Early clarification of operational requirements in addition to early communications and cooperation with the other Hanford contractors produced pre-conceptual line routing and planning that minimized subcontractor rework on design efforts.
- L-897, *Central Plateau Water Treatment Facility*: Favorable VAC is due to the awarded contract bid for procurement of conceptual design services being ~\$325K under budget.
- L-853, *200E Sewer Flow Equalization Facility*: Favorable VAC is due to efficiencies in both subcontractor design efforts and project support. Efficiencies are associated with using historical geotechnical reports in lieu of performing a new geotechnical survey, and weekly design workshops to address concerns and provide timely design inputs to minimize rework. Construction phase efficiencies are forecast due to the timely receipt of the fixed price construction proposal and subsequent contract award.
- L-854, *200E Sewer Consolidation*: Favorable VAC is due to forecasted construction phase efficiencies because the fixed price construction proposal was substantially below the project estimate.



- 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 less than was budgeted.
- L-815, *Upgrade Transmission/Distrib Access Rds*: Favorable VAC is due, in part, to those drivers noted for cumulative and FYTD positive cost variances. Additionally, less rock has been procured to date than was planned.
- L-612, *230kV Transmission System Reconditioning and Sustainability Repairs*: Favorable VAC is due to the subcontracted conceptual design completing significantly lower than planned. In addition, due to the delay in design, ~\$130K of work has moved past the May 2019 contract period.
- ET51, *HLAN Network Upgrade - Phase 2A*: Unfavorable VAC is due to realization of risk surrounding unplanned technical problems and their subsequent resolution, and higher than originally planned installation costs. Installation of network switches is forecast to be complete in October, and closeout in November. At the current rate of installations and corresponding costs, additional funding will be needed to complete the project. The proposed BCR will increase Budget at Completion (BAC) which will reduce the Variance at Completion (VAC). Impact(s) will be calculated upon approval of the BCR.

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 1 | | | | |
|--|---|--------------------------|-----|--------|----------------|-----------------|----------------|-----------------|-------------|------|------|------|------|
| Activity ID | Activity Name | OD | RD | % Comp | Baseline Start | Baseline Finish | Forecast Start | Forecast Finish | 15 | 2016 | 2017 | 2018 | 2019 |
| ET-51 | ET-51, HLAN Network Upgrade - Phase 2A | 263 | 80 | 92.7% | 05-Jun-17 | 19-Jun-18 | 05-Jun-17 A | 19-Sep-18 | | | | | |
| L-357 | L-357, Replace 12" Potable Water Line to 222-S Lab | 156 | 189 | 17.2% | 03-Jul-17 | 03-Jan-19 | 29-Jun-17 A | 27-Feb-19 | | | | | |
| L-612 | L-612, 230kV Transmission System Reconditioning and Sustainability Upgrades | 352 | 628 | 72.7% | 31-Aug-15 | 23-May-19 | 31-Aug-15 A | 19-Nov-20 | | | | | |
| L-789 | L-789, Prioritized T&D System Wood Pole Upgrades | 203 | 264 | 27.1% | 06-Sep-16 | 23-May-19 | 06-Sep-16 A | 13-Jun-19 | | | | | |
| L-791 | L-791, RFL Transfer Trip Upgrades | 99 | 99 | 0% | 07-May-18 | 25-Sep-18 | 29-May-18* | 16-Oct-18 | | | | | |
| L-815 | L-815, Upgrade Transmission/Distrib Access Rds | 147 | 79 | 67.4% | 02-Jan-18 | 18-Sep-18 | 27-Dec-17 A | 18-Sep-18 | | | | | |
| L-849 | L-849, Replace 200E 1.1M-gal PW Tank | 375 | 188 | 8% | 02-Jan-18 | 05-Nov-18 | 02-Jan-18 A | 26-Feb-19 | | | | | |
| L-850 | L-850, Replace 200W 1.1M-gal PW Tank | 375 | 188 | 9.3% | 02-Jan-18 | 05-Nov-18 | 02-Jan-18 A | 26-Feb-19 | | | | | |
| L-853 | L-853, 200E Sewer Flow Equalization Facility | 309 | 168 | 87.3% | 17-Aug-15 | 28-Jan-19 | 17-Aug-15 A | 28-Jan-19 | | | | | |
| L-854 | L-854, 200E Sewer Consolidations | 283 | 154 | 51.2% | 17-Aug-15 | 08-Jan-19 | 17-Aug-15 A | 08-Jan-19 | | | | | |
| L-888 | L-888, 400 Area Fire Station | 244 | 224 | 0.3% | 30-Apr-18 | 18-Apr-19 | 30-Apr-18 A | 17-Apr-19 | | | | | |
| L-894 | L-894, Raw Water Cross Connection Isolation 200E/W | 376 | 271 | 18.6% | 29-Aug-16 | 23-May-19 | 29-Aug-16 A | 24-Jun-19 | | | | | |
| L-895 | L-895, Fire Protection Infrastructure for Plateau Raw Water | 375 | 52 | 79% | 09-Jan-17 | 02-Jul-18 | 09-Jan-17 A | 09-Aug-18 | | | | | |
| L-897 | L-897, Central Plateau Water Treatment Facility | 375 | 67 | 93.2% | 29-Nov-17 | 18-Jun-18 | 29-Nov-17 A | 30-Aug-18 | | | | | |
| S-245 | S-245, Live Fire Shoot House | 375 | 95 | 60.3% | 21-Sep-17 | 10-Oct-18 | 21-Sep-17 A | 10-Oct-18 | | | | | |

| | | |
|--|---|---|
|  Remaining Work  Baseline | MSC - Reliability Projects Summary Schedule Data Date: 27-May-18 |  |
|--|---|---|



9.0 BASELINE CHANGE REQUEST LOG (BCR)

Baseline Change Request Log for May 2018

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

Two BCRs incorporated Contract Modifications:

- VMSA-18-014 –Mod 698 – Definitization of Access to & Ownership of Records Proposal and Fee
- VPMTO-18-002 Rev 1 – Mod 697 – PMTO-18-002 Plutonium Finishing Plant Expert Panel Extends Period of Performance and Increases Budget

Three BCRs related to Reliability Projects:

- VMSA-18-004 – Move Budget to S-245 from Management Reserve for Realized Risk & Re-Plan Construction Schedule
- VRL0201RP-18-020 – Create Two Level 5 WBSs for Reliability Project FY 2018 Planning Packages and Move Budget from the FY 2019 Reliability Project Out Year Planning Package
- VRL0201RP-18-021 – Create One Level 4 and Three Level 5 WBSs for L-796 and Move Budget for Design and Construction from Reliability Projects Out Year Planning

Two BCR was Administrative in Nature:

- VMSA-18-003 Rev 7 – Administrative BCR – Create Lower Level Task Order (LLTO) WBSs for Cost Collection Established in the Month of May
- VG&A-18-002 – Create One Level 4 and One Level 5 WBS for Compliance (G&A)

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 | FY18 Budget | FY18 Management Reserve | Post Contract Budget | Post Contract Mgmt Reserve | Total Lifecycle | Cum Lifecycle Budget |
| Prior PMB Total | Mar 2018 | 1,230,506 | | 1,230,506 | 1,230,506 | 276,499 | | 1,189,360 | | 2,419,866 | 2,419,866 |
| VMSA-18-003 Rev 7 | | | | | | 0 | | 0 | | 0 | 2,419,866 |
| VMSA-18-004 Rev 1 | | | | | | 527 | | 527 | | 527 | 2,420,393 |
| VMSA-18-014 | | | | | | 242 | | 301 | | 301 | 2,420,694 |
| VRL0201RP-18-020 | | | | | | 254 | | 0 | | 0 | 2,420,694 |
| VRL0201RP-18-021 | | | | | | 67 | | 0 | | 0 | 2,420,694 |
| | Apr 2018 | 1,230,506 | | 1,230,506 | 1,230,506 | 277,589 | | 1,190,188 | | 2,420,694 | |
| Prior Non-PMB Total | Mar 2018 | 604,007 | | 604,007 | | 132,519 | | 513,119 | | 1,117,126 | 1,117,126 |
| VPMT0-18-002 Rev 1 | | | | | | 14 | | 14 | | 14 | 1,117,140 |
| Revised Non-PMB Total | Apr 2018 | 604,007 | | 604,007 | | 132,533 | | 513,133 | | 1,117,140 | |
| Total Contract Performance Baseline | Apr 2018 | 1,834,513 | | 1,834,513 | 1,834,513 | 410,122 | | 1,703,321 | | 3,537,834 | |
| Management Reserve | Mar 2018 | | 0 | 0 | | | 5,644 | | 5,644 | 5,644 | 5,644 |
| VMSA-18-004 Rev 1 | | | | | | | (527) | | (527) | (527) | 5,117 |
| Revised Management Reserve | Apr 2018 | | 0 | 0 | | | 5,117 | | 5,117 | 5,117 | |
| Total Contract Budget Base | | | | 1,834,513 | | | | 1,708,438 | | 3,542,951 | |
| Prior Fee Total | Mar 2018 | 109,961 | | 109,961 | | 22,171 | | 100,489 | | 210,450 | 210,450 |
| VMSA-18-014 | | | | | | 18 | | 23 | | 23 | 210,472 |
| VPMT0-18-002 Rev 1 | | | | | | 1 | | 1 | | 1 | 210,473 |
| Revised Fee Total | Apr 2018 | 109,961 | | 109,961 | | 22,191 | | 100,513 | | 210,473 | |
| Change Log Total | Apr 2018 | | | 1,944,473 | | | | 1,808,950 | | 3,753,424 | |



10.0 RISK MANAGEMENT

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

- The Risk Management Board was held to review and approve the proposed new and closed risks, and review the overall company risk posture associated with April data. The following items were approved:
 - One new Mission Risk and associated Risk Handling Plan related to Environmental, Safety & Health (ES&H).
 - One Mission Risk was closed, related to Public Works (PW).
 - One ES&H Mission Risk was significantly re-characterized.
 - 18 new Reliability Project risks: two for Project L-612, *230kV Transmission System Sustainability Upgrades*; eleven for Project L-791, *RFL Transfer Trip Upgrades*; two for Project L-894, *Raw Water Cross Connection Isolation 200E/W*; and one each for Projects L-853, *200E Sewer Flow Equalization Facility*; L-854, *200E Sewer Consolidations*; and S-245, *Live Fire Shoot House*.
 - Three Project Risks were significantly re-characterized: one for Project L-357, *Replace 12-in. Potable Water Line to 222-S Lab*, and two for Project S-245.
 - One Project Risk related to Project L-789, *Distribution System Refurbishments*, was put on hold, as the associated scope has been rescheduled for Fiscal Year 2020.
 - Nine Project Risks were closed: two for Project L-357, three for Project L-894, and one each for Projects L-853, L-854, L-895, *Fire Protection Infrastructure for Plateau Raw Water*, and S-245.
- Risk Reporting – In May, in accordance with the MSC-PLN-RIM-42375, *Hanford Mission Support Contract Risk Management Plan*, the monthly Risk Management report was submitted to the RL Contracting Office. This report consisted of March data.
- 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:
 - Project Risk Elicitation: Risk Management facilitated a risk elicitation for the Enterprise Asset Management (EAM) Transfer Project. The associated risk register is in development.
 - Monte Carlo Quantitative Risk Analysis: Risk Management completed the Preliminary and Final quantitative analyses for Project L-895, *Fire Protection Infrastructure for Plateau Raw Water*. The final analysis report was approved.
 - 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:
 - Risk Register Database Software Solution Initiative: Risk Management provided charging authorization and notice to proceed to MSA Interface Management Software Engineering services to begin the process for transferring the Enterprise Risk and Opportunity Management System (EROMS) from WRPS to MSA. Revisions to the software to support multi-tenant use will begin once the transfer is complete.
 - Request for Services (RFS) Proposal Support: Performed risk review of one RFS proposal for providing OPEXShare Web Application Support for Alliance for Sustainable Energy at the National Renewable Energy Laboratory. This proposal had appropriate scope assumptions, and no expected risk impacts.



11.0 DASHBOARD SUMMARY

Table 11-1. Performance Evaluation and Measurement Plan

| May FY 2018 | | | | | | |
|---|---|--|------------|------------|-----|--|
| 2018 Performance Evaluation and Measurement Plan | | | | | | |
| Deliverables | | Plan | MSA | Status | | |
| | | | | YTD | MAY | |
| 1.0 Effective Site Cleanup - Achievement of cleanup contractors' key milestones and regulatory commitments | | | | | | |
| 1.1 | Demonstrate that the following performance measure targets were met. | | 9/30/2018 | Von Barga | | |
| | a | Biological Controls – Pest Removal | | Synoground | | |
| | b | Biological Controls – Tumbleweed Removal | | Synoground | | |
| | c | Biological Controls – Vegetation | | Synoground | | |
| | d | Contractor Assurance System - Assessments | | Jensen | | |
| | e | Contractor Assurance System - Causal Analysis | | Jensen | | |
| | f | Contractor Assurance - Issue Resolved | | Jensen | | |
| | g | Crane and Crew Support | | Von Barga | | |
| | h | Facilities Maintenance | | Von Barga | | |
| | i | Fire Systems - Inspection, Testing and Maintenance | | Walton | | |
| | j | Fire Systems - Priority 1 Emergency Impairments | | Walton | | |
| | k | Fire Systems - Priority 2 Emergency Impairments | | Walton | | |
| | l | Fire Systems - Priority 3 Emergency Impairments | | Walton | | |
| | m | Fleet Services – Heavy Equipment (Cranes) | | Von Barga | | |
| | n | Fleet Services – Heavy Equipment (Evacuators) | | Von Barga | | |
| | o | Fleet Services – Heavy Equipment (General Purpose) | | Von Barga | | |
| | p | Fleet Services – Light Equipment (Hanford Patrol) | | Von Barga | | |
| | q | Fleet Services – Light Equipment (Hanford Fire) | | Von Barga | | |
| | r | Fleet Services – Light Equipment (Special Purpose Trucks) | | Von Barga | | |
| | s | IT - Cyber Security – System Patching | | Eckman | | |
| t | RSS - Dosimetry External Services | Wilson | | | | |
| u | RSS - Instrument Calibration | Wilson | | | | |
| v | K Basin Sludge Support | Von Barga | | | | |
| 1.2 | Enhance the Integration of MSA's performance and business reporting systems in order to comprehensively demonstrate in a credible, objective and transparent manner, the achievement of MSA's key milestones and regulatory commitments and that MSA is enabling the achievement of Other Hanford Contractors' key milestones and regulatory commitments. | | 9/30/2018 | Young | | |
| | a | Partnering with DOE, develop and provide a meaningful joint briefing to DOE-RL and MSA leadership that achieves alignment on the concepts and principles of the MSA Assurance System by 11/15/17 that includes at a minimum Operations, Financial, Maintenance, Work Management, Emergency Management, Safety and Environmental. | 11/15/2017 | Young | | |
| | b | Develop an effective transition/implementation plan to drive change and present it to DOE. | 1/30/2018 | Young | | |
| | c | Implement a workable MSA Assurance System that can serve as a prototype and conduct a joint review with DOE. | 9/30/2018 | Young | | |
| | d | Complete applicable improvement actions identified by the MSA Contractor Assurance System independent assessment and update supporting system description documentation along with other transition/implementation actions. | 9/30/2018 | Jensen | | |

LEGEND

= On Schedule

= Objective missed

N/A = Not Applicable (Updated quarterly)

= Complete

= In jeopardy



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

| May FY 2018 | | | | | | | | |
|---|--|---|-----------|-------------|-------------|-------------|--|-----|
| 2018 Performance Evaluation and Measurement Plan | | | | | | | | |
| Deliverables | | Plan | MSA | Status | | | | |
| | | | | YTD | MAY | | | |
| 1.0 Effective Site Cleanup - Achievement of cleanup contractors' key milestones and regulatory commitments | | | | | | | | |
| 1.3 | Demonstrate effective management of electric, water and sewer utilities to maximize reliability and redundancy | | 9/30/2018 | Synoground | On Schedule | On Schedule | | |
| | Water | Maintain Raw Water Pressure at ICD Level | | | | | | |
| | | Maintain Potable Water Pressure at ICD Level | | | | | | |
| | | Perform Preventative maintenance at 90% or better each month | | | | | | |
| | | Reduce corrective maintenance (including backlog) to an average completion of 365 days or less | | | | | | |
| | | Ensure all water quality samples are completed on time | | | | | | |
| | | Complete Water master plans on or before contract deliverable date | | | | | | |
| | Quarterly System Health Report by Engineering | | | | | | | N/A |
| | Sewer | Perform Preventative maintenance at 90% or better each month | | | | | | |
| | | Reduce corrective maintenance (including backlog) to an average completion of 365 days or less | | | | | | |
| | | Complete Sewer master plans on or before contract deliverable date | | | | | | |
| | | Quarterly System Health Report by Engineering | | | | | | N/A |
| | Electrical | Electrical power availability | | | | | | |
| Perform Preventative maintenance at 90% or better each month | | | | | | | | |
| Reduce corrective maintenance backlog identified prior to October 2017 by 50% | | | | | | | | |
| Quarterly System Health Report by Engineering | | | N/A | | | | | |
| 1.4 | Demonstrate effective development and management of reliability projects that assure mission milestones and regulatory commitments are met | | 9/30/2018 | Von Bargaen | On Schedule | On Schedule | | |
| | a | Prepare and issue Projects L-781, L-826, L-851, L-852 Engineering Evaluation and Hydraulic Analysis Study | 4/30/2018 | | | | | |
| | b | Complete Planning Activities and Issue Design BCRs for Projects L-781, L-791, L-826, and L-851 | 9/30/2018 | | | | | |
| | c | Complete Planning Activities and Issue Design BCR for Project L-898 | 3/31/2018 | | | | | |
| | d | L-894, Definitive Design Complete | 4/18/2018 | | | | | |
| | e | L-895, Definitive Design Complete | 8/10/2018 | | | | | |
| | g | L-357, Definitive Design Complete | 3/26/2018 | | | | | |
| | h | L-853, Phase 1-5 Construction Complete | 9/30/2018 | | | | | |
| | i | S-245, Construction Complete | 9/30/2018 | | | | | |
| | j | Complete two Reliability Project team training events to improve knowledge, interaction and overall project execution | 3/31/2018 | | | | | |

LEGEND

= On Schedule

= Objective missed

= Not Applicable (Updated quarterly)

= Complete

= In jeopardy



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

| May FY 2018 | | | | | | |
|--|--|-----------|-------------|--------|-----|-----|
| 2018 Performance Evaluation and Measurement Plan | | | | | | |
| Deliverables | | Plan | MSA | Status | | |
| | | | | YTD | MAY | |
| 2.0 Efficient Site Cleanup - Align resources and capabilities to support the site cleanup mission | | | | | | |
| 2.1 | Maximize efficient MSA use of resources to meet the other Hanford contractors' changing project needs. | 9/30/2018 | Von Bargaen | | | |
| 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. | 9/30/2018 | Von Bargaen | | | |
| | 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 FY18 Operational Excellence events will be focused on crosscutting inter-contractor Site Integration opportunities. | | | | | |
| | c Reserved | | | | | N/A |
| | d Implement FY 18 selected assest management system recommended by the FY17 site integrator alternatives analysis of computerized maintenance report excluding fire system maintenance and safeguards. Successfully completion of FY18 activities to implement EAM as the MSA CMMS will be codument by providing the following to DOE-RL | | | | | |
| | EAM Software Management Plan | | | | | |
| | EAM Functional Requirement Documentation | | | | | |
| | EAM Software Design Description | | | | | |
| | EAM Requirments Traceability Matrix | | | | | |
| | EAM Acceptance Test Report | | | | | |
| e Through an annual Site Integration Self-Assessment Report, evaluate how well MSA performed the above measures against the stated objectives. MSA's approach, objectives, tools and processes, and results will be considered as part of the Site Integration Self-Assessment Report, which will be submitted in the fourth quarter of FY 2018. | | | | | | |
| 3.0 Comprehensive Performance | | | | | | |
| 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. | | 9/30/2018 | Wilkinson | | | |
| Provide leadership to improve management effectiveness and collaborate and participate proactively with customers. | | | | | | |
| Work with DOE and the other Hanford contractors in a spirit of cooperation to demonstrate operational excellence to include, but not limited to, the following areas: | | | | | | |
| Business and financial management using approved purchasing, estimating, property, budget, planning, billing, labor, accounting, and performance measurement systems, providing visibility and transparency to DOE with respect to each of the forgoing | | | | | | |
| Contract change management and subcontract administration and consent activities, e.g., proposal review and negotiation process, including timely and adequate submission of proposals and requests for additional data, timely counteroffers, and attaining small business goals | | | | | | |
| Safeguards and security, fire department operations, emergency response, and emergency operations/emergency management | | | | | | |
| 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

= Not Applicable (Updated quarterly)

= Complete

= In jeopardy

12.0 CONTRACT DELIVERABLES STATUS

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

Table 12-1. May 2018 – June 2018 Contract Deliverables

| Deliverable | Responsible | Date Due | Date Submitted to DOE | Action | Response Time | Date Due from DOE | Date Approved by DOE |
|--|-------------|----------|-----------------------|-------------|---------------|-------------------|----------------------|
| Milestone Review and IAMIT Meeting Minutes - Mar | Wilson | 05/05/18 | 04/09/18 | Information | N/A | N/A | N/A |
| Monthly Billing Reports for DOE Services - Apr | Eckman | 05/05/18 | 04/30/18 | Information | N/A | N/A | N/A |
| Monthly Performance Report - Mar | Olsen | 05/10/18 | 05/07/18 | Review | None | None | None |
| Hanford Site Wildland Fire Plan | Walton | 05/15/18 | 05/15/18 | Approve | 30 days | 06/15/18 | 06/04/18 |
| Bonneville Power Administration (BPA) Power and Transmission Service invoice verification and breakdown of site contractor costs - Feb | Synoground | 05/30/18 | 05/30/18 | Review | 30 days | 06/30/18 | |
| Radiological Assistance Program Response Plan for RAP Region 8 | Walton | 06/01/18 | 05/24/18 | Approve | 60 days | 07/24/18 | |
| Water System Master Plan | Synoground | 06/01/18 | 05/30/18 | Approve | 90 days | 08/30/18 | |
| Sewer System Master Plan | Synoground | 06/01/18 | 05/29/18 | Approve | 90 days | 08/29/18 | |
| Monthly Billing Reports for DOE Services - May | Eckman | 06/05/18 | 06/04/18 | Information | N/A | N/A | N/A |
| Monthly Performance Report - Apr | Olsen | 06/10/18 | 06/07/18 | Review | None | None | None |
| Annual Electrical Load Forecasts | Synoground | 06/15/18 | | Review | 30 days | 07/15/18 | |
| Annual Field Emergency Preparedness Evaluation Exercise Report | Walton | 06/22/18 | | Approve | 45 days | 08/06/18 | |
| Bonneville Power Administration (BPA) Power and Transmission Service invoice verification and breakdown of site contractor costs - Apr | Synoground | 06/30/18 | | Review | 30 days | 07/30/18 | |
| Content (Records) Management Security Plan | Eckman | 06/30/18 | | Approve | 45 days | 08/14/18 | |
| Hanford Site Interface Management Plan | Von Bargaen | 06/30/18 | | Review | 30 days | 07/30/18 | |

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

No Government-Furnished Services and Information (GFS/I) items were due to MSA in May 2018. There are two 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).

MSA understands that the RL planning case has been prepared, and that DOE-ORP intends to use the base case from the River Protection Project System Plan, Rev. 8, and the updated baseline for the Waste Treatment and Immobilization Plant.



13.0 SELF-PERFORMED WORK

Table 13-1. Mission Support Contract Socioeconomic Reporting.

| Plan Category | MSA Goal | FY 2018 Actual To-Date | Cumulative % |
|---------------------------------------|--------------------|------------------------|--------------|
| Small Business | 50.0% | 82.6% | 59.0% |
| Small Disadvantaged Business | 10.0% | 26.8% | 16.9% |
| Small Women-Owned Business | 6.8% | 22.0% | 13.2% |
| HubZone | 2.7% | 7.0% | 5.3% |
| Small Disadvantaged, Service Disabled | 2.0% | 5.4% | 5.7% |
| Veteran-Owned Small Business | 2.0% | 6.3% | 7.0% |
| Local Small Business | Highest Preference | 49.6% | - |

Through May 2018

Prime Contract Targets:

- At least 40% contracted out beyond MSA, LLC = 45% (\$1.595B/\$3.576B)
- Small Business 25% of Total Mission Support Contract (MSC) Value = 26% (\$0.941B/\$3.576B)