

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 0078	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY Strategic Petroleum Reserve Project SPRO U.S. Department of Energy 900 Commerce Road East US 492 New Orleans LA 70123	CODE 892435	7. ADMINISTERED BY (If other than Item 6) SPRO U.S. Department of Energy SPRO 900 Commerce Road East US 492 New Orleans LA 70123	CODE 01601	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) Fluor Federal Petroleum Operations, LLC Attn: Paul Avery 850 S Clearview Pkwy New Orleans LA 701233401		(x)	9A. AMENDMENT OF SOLICITATION NO.	
CODE 078490442			9B. DATED (SEE ITEM 11)	
FACILITY CODE		x	10A. MODIFICATION OF CONTRACT/ORDER NO. DE- FE0011020	
			10B. DATED (SEE ITEM 13) 09/18/2013	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) See Block 14

E. IMPORTANT: Contractor is not, is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)



Pursuant to the authority Clauses H.2 Modification Authority, H.13 Technical Direction - DEAR 952.242-70, H.17 Responsible Corporate Official and Corporate Board of Directors, H.21 Work Authorization Directives, and I.132 DEAR 970.5232-3.

A. Reference Section J, Attachment B - Work Authorization Directives (WADs): The Fiscal Year 2019 WADs for the period October 1, 2018 through September 30, 2019, dated September 28, 2018, are hereby incorporated by reference.

The contract value remains \$2,782,077,864.32.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Paul M. Avery / Sr. Contracts Manager		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Sally L. Leingang	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 12/19/2018	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 12/19/2018

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
DE-FE0011020/0078

PAGE OF
2 2

NAME OF OFFEROR OR CONTRACTOR
Fluor Federal Petroleum Operations, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Payment: OR for SPRO U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 6017 Oak Ridge TN 37831 Period of Performance: 04/01/2014 to 03/31/2024				

ATTACHMENT B - WORK AUTHORIZATION DIRECTIVES

The Fiscal Year 2019 WADs for the period October 1, 2018 through September 30, 2019, dated September 28, 2018, are hereby incorporated by reference.

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve


1. TITLE: Environment

2. WORK AUTHORIZATION NO.: 2019-1.J 3. REVISION: 0

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$3,442,499

6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveEnvironmentI. DESCRIPTION OF WORK

The Contractor shall develop, implement, and maintain a comprehensive Strategic Petroleum Reserve (SPR) integrated Environmental Protection Program (to include Environmental Management System elements) that incorporates applicable Department and national environmental protection and sustainability goals. The Contractor shall maintain the pollution prevention/waste minimization program within the workplace and incorporate it into all mission statements, project plans, maintenance and operations activities. The Contractor shall develop and implement sustainable environmental stewardship in compliance with practices stated in Department of Energy (DOE) Order (O) 436.1 and aligned with the DOE Site Sustainability Plan - which encourages water and energy conservation, compliance with the Guiding Principles for Sustainable Buildings, and reducing the generation of wastes through source reduction, recycling, and environmentally preferable purchasing.

The Contractor shall conduct all business in a manner that will ensure the SPR complies with environmental requirements including SPR Project Management Office (SPRPMO) O 436.1A, Site Sustainability;, SPRPMO N 450.4 Implementation of Environmental, Safety and Health Contractor Requirements Documents; SPRPMO M-450.1-1B, the SPRPMO Environmental, Safety and Health Manual N; SPRPMO N 450 series SPR Environmental, Security, Safety and Health, and Emergency Preparedness Goals Fiscal Year 2019; SPRPMO 0037 Integrated Safety Management System Description; DOE Acquisition Regulation clause located at the Code of Federal Regulations, Title 48, Part 970, Section 5223-1; DOE Order 473.3A, Chg 1 (MinChg), Protection Program Operations; DOE Order 231.1B, Admin Change 1, Environment, Safety and Health Reporting;; other SPRPMO Orders and guidance; applicable DOE Orders and Guidance; and other Federal, state, and local environmental requirements, including but not limited to Hazardous Materials Regulations; the Clean Air Act; Clean Water Act; Oil Pollution Act; National Environmental Policy Act (NEPA); Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act; Superfund Amendments and Reauthorization Act (SARA);

Emergency Planning and Community Right To Know Act; Safe Drinking Water Act; Coastal Zone Management Act; Endangered Species Act; National Historic Preservation Act; and applicable Executive Orders pertaining to sustainability, greenhouse gas reduction, cultural resources, floodplains, wetlands, environmental justice, procurement/recycling and pollution control.

The Contractor shall conduct environmental surveillance and monitoring, prepare routine NEPA documentation, environmental permit applications, reports, and conduct limited special studies to support this WAD.

In an advisory capacity, the M&O shall ensure that NEPA reviews are conducted and documents are prepared for all applicable agency actions. Conduct and document that NEPA reviews and documentation are conducted beginning at the conceptual stage and all modification stages. Ensure timely submission of NEPA documentation for activities received through the SPR review process. The M&O, as agent for the government, will manage documentation and required public postings, and maintain official records.

The M&O prepares routine environmental permit applications and, in recognition of its operator responsibilities, may sign applications as operator where required by the governing regulatory agency with a concurrence signature from DOE Technical Assurance and submits the environmental applications to the regulatory agency on behalf of DOE.

The M&O shall ensure that the number of permit exceedances reported on the Discharge Monitoring Reports are kept to the minimal extent practical, with a target value of a maximum allowed number of eight annually.

The M&O shall ensure that the number of reportable releases, as defined by Federal and State regulatory agencies, to the environment is to the minimal extent practical, with a stretch target value of four or less and maximum allowed number (i.e., target value) of six for the fiscal year. The reportable release cannot result in natural resource damage and must be properly mitigated/cleaned in accordance with applicable environmental guidelines.

As part of the Environmental Program, the Contractor shall maintain the SPR Environmental Management System (EMS) current, in conformance with and registered with the ISO 14001 Standard. During FY 2019, the Contractor shall maintain the EMS to be in conformance with the ISO 14001-2015 version of the Standard by completion of a surveillance audit by an independent third party.

As a part of the Environmental Program, the Contractor shall develop, implement, and maintain a Waste Management Program to include necessary quality assurance and quality control procedures; waste sampling and analyses, characterization, and certification; waste storage areas, satellite accumulation points, segregation, container management and shipment; waste re-evaluation frequencies; hazardous waste stream profiles to include source processes and activities; exempted wastes with supporting documentation such as regulatory waivers; pollution prevention and environmentally preferable purchasing; waste minimization, reduction and recycling; waste treatment; removal, and disposal; documentation and maintenance of environmental records; assessment of environmental laboratory testing and waste treatment/storage/disposal vendors and facilities; and written procedures describing and documenting compliance with Federal, State, and local regulations and applicable DOE Orders, directives, and Executive Orders. The Contractor will act on behalf of the DOE with regard to proper waste classification, storage, representation, shipment, and disposal and represent all waste stream management in accordance with local, State, and Federal rules and regulations. The Contractor supports preparation of and signs on behalf of DOE, waste-related documents as appropriate, and provides the above activities in support of other DOE prime contractors, who will coordinate their schedules and activities with the Contractor's Environmental organization. The Contractor shall divert at least 50% of Non-Hazardous Solid Waste; divert at least 50% Construction & Disposal materials and debris; and demonstrate that the M&O has a program in place to minimize the acquisition, use, and disposal of hazardous chemicals and materials where economically feasible

The Contractor will ensure transporters are licensed, as applicable, and are included on the SPR Qualified Disposers, Recyclers, and Transporters (DRT) List. The Contractor will ensure its employees who handle or have the responsibility for those who handle and/or manage hazardous materials and/or wastes receive function-specific training at the minimum frequency required by applicable regulations.

As appropriate or as the need arises, the M&O shall provide technical and administrative support for SPR remedial actions related to facility closure, facility lease, real property acquisition, decommissioning, ground water management or ground water monitoring activities. The M&O will provide program cost estimates, schedules, and planning support; perform or procure services for site characterization activities; and perform remedial actions as authorized by the Contracting Officer, including corrective actions under Comprehensive Environmental Response, Compliance, and Liability Act (CERCLA) or Resource Conservation and Recovery Act (RCRA) and for environmental management and SPR activities.

To comply with the requirements of the Energy Independence and Security Act of 2007, the Contractor shall participate in an annual evaluation of the site real property in support of Technical Support and Management WAD No. 2019-1.T by identifying building deficiencies that affect site energy efficiency and water usage efficiency, or pose environmental hazards (e.g. lead-containing potable water fixtures). Deficiencies shall be identified, risk ranked, categorized, and dispositioned according to the requirements of the Site Sustainability Plan, the DOE Sustainability Dashboard and the TSM WAD No. 2019-1.T. Assessments should be performed at one site per year, so that each site is assessed once every four years.

The M&O shall perform the following Environmental Program activities:

A. Administration

1. The administrative function involves qualified supervision and administrative support staff. The administrative staff will perform the following general support functions for the Environmental Program:
 - a. Develop and maintain a trackable and identifiable Environmental Program Budget cross-walked with DOE Fiscal Year Budgets with briefings provided to the DOE ES&H Director as requested.
 - b. Prepare, review, and update the various permits, reports, and documents as required by DOE and regulatory agencies.
 - c. Serve as repository of SPRPMO official governmental environmental records, as required by environmental regulations and DOE Records Disposition Regulations.
 - d. Prepare and make presentations, as necessary, to illustrate or explain relevant environmentally-related activities.
 - e. Provide oversight and support of environmentally-related activities appropriate to ensure compliance.
 - f. Administer M&O Contractor Environmental subcontracts affecting the environment where designated as Subcontract Manager's Technical Representative.

- g. Coordinate with DOE environmental counterparts to ensure DOE's timely awareness of environmental issues/problems, proposed regulatory requirements, and knowledge of operating procedures.
- h. Maintain current ES&H standards affecting the SPR.
- i. Participate in environmental partnerships, such as the Energy Facilities Contractors Group (EFCOG) as appropriate, for the SPR.
- j. Ensure compliance with the applicable aspects of DOE O 436.1 Departmental Sustainability, Contractor Requirements Document.
- k. Ensure compliance with DOE P 451.1, National Environmental Policy Act Compliance Program and SPRPMO Order 451.1D, National Environmental Policy Act Implementation Plan.

B. Self-Assessment Program

- 1. Conduct the environmental portion of Organizational Assessments (OAs) in accordance to M&O Organizational and Management Assessment – Version 7.0 (NOI 1000.72).
- 2. Conduct self-assessments in support of the FFPO Environmental Management System.

C. Permitting

- 1. Monitor SPR environmentally-related activities to ensure compliance with permits.
- 2. Maintain current status of existing and proposed regulations affecting permitting.
- 3. Prepare and submit permit applications for the SPR for new, renewal, modified, or existing requirements.

D. Program Elements

- 1. Protection of Air Quality. Ensure SPR compliance with the Clean Air Act and related Federal and State regulations and orders. Activities

include source monitoring; surveillance activities; emission source and control device permitting application and maintenance; air contaminant source control operations; and reporting. Maintain and provide, as required, accurate emissions metrics.

2. Protection of Water Quality. Ensure SPR compliance with the Clean Water Act, Oil Pollution Act, Safe Drinking Water Act, and related Federal and State regulations and orders. Activities include groundwater protection; permit applications and maintenance; discharge facility treatment/control; drinking water program compliance; effluent monitoring and environmental surveillance; spill prevention, control and countermeasures; and corresponding State requirements; partnering with emergency management on maintaining spill response checklists; and reporting. Ensure timely and accurate submission, as required, of the following regulatory requirements: Coastal Zone Management Consistency Determinations; Corps of Engineers Section 10 and Section 404 Permit Applications; Discharge Permit Applications/Modifications/Reporting; Drinking Water Sampling Plans and Results and Water Metrics.
3. Solid and Hazardous Waste Generation and Control. Ensure SPR compliance with the Resource Conservation and Recovery Act and the Solid Waste Disposal Act, and related Federal and State regulations, applicable DOE Orders and Executive Orders. Activities include waste characterization, certification, accumulation, handling, removal, and disposal activities to assure conformance with applicable Federal and State regulations and orders; to assure that oversight and support are provided to operations and maintenance of facilities; and reporting. Ensure waste characterization is reviewed annually and updated as needed. Maintain and provide as required accurate Waste Summary Reports for all waste generated on SPRPMO sites. Ensure Off-Site Treatment Storage Disposal (TSD) facilities are permitted in accordance with Federal and State requirements. Conduct assessments of Off-Site TSD facilities prior to SPRPMO use.
4. Control of Toxic Substances. Ensure SPR compliance with the Federal Insecticide, Fungicide, and Rodenticide Act; the Toxic Substance Control Act; Superfund Amendments and Reauthorization Act; the Comprehensive Environmental Response Compensation, and Liability Act; related Federal and State regulations, and applicable DOE Orders and Executive Orders.

5. Pollution Prevention and Waste Minimization. Ensure SPR compliance with the Pollution Prevention Act and applicable DOE Orders. Activities include maintenance of waste minimization, pollution prevention, and sustainable acquisition; to assure conformance with applicable Federal and State regulations, applicable DOE Orders and Executive Orders, and to assure that oversight and support are provided to operations and maintenance of facilities. Maintain a cost-effective pollution prevention program. Maintain and provide as required accurate sustainable acquisition statistics.

6. Management, Oversight, and Reporting. Ensure the SPR EMS maintains conformance and registration with the ISO 14001-2015 standard. The ISO 14001-2015 EMS is the supporting environmental element to the SPR Integrated Safety Management System. Provide oversight and direction of all environmental activities to assure compliance with applicable Federal, state, and local laws, regulations, applicable DOE Orders and Executive Orders. Activities include general program oversight; maintain Environmental Compliance Program; management of environmental information systems; development of environmental protection strategies and plans; coordination with Federal, state, and local regulators; environmental surveillance and monitoring; internal and external communications; community outreach; Environmental Advisory Committee; program evaluation and reporting; and ensuring compliance with the National Environmental Policy Act (NEPA), Coastal Zone Management Act, Endangered Species Act, National Historic Preservation Act, and related Federal and State regulations and orders. Ensure timely and accurate submission as required of the following regulatory requirements: air emissions permit applications/modifications; general permit review against projects; NEPA assessments, documentation, and evaluations; fee payments, permit usage, and license fees. Review and provide advice on environmental incident reports. Ensure timely and accurate submission as required of the following: environmental program briefing/project review; corrective action plans; implementing procedures (site and program); and quarterly status briefing of all the Environmental Contractor Assurance System (CAS) activities required for completion in the previous quarter.

II. DELIVERABLES

Deliverables are classified as:

- A. Regulatory Requirements – based in law or regulation;
- B. Headquarters Requirements – driven by direction or order from DOE Head Quarters; and
- C. Local Requirements – based on agreements or direction by DOE locally.

Dates are indicated where feasible; however, should one of the below dates become inconsistent with an official milestone, the milestone shall govern. Electronic via Link to a Document Management System and hard copies are distinguished by the letters E and H, respectively. All drafts of deliverables requiring SPRPMO action (e.g., signatures) will be due 3 weeks prior to the final milestone, where reasonable, of the (CMCR) due date. All deliverables are due by the established regulatory or baseline milestone due date and will be tracked on the weekly Environmental Report, Actions and Status page projected out 30 calendar days. All deliverables will be managed according to the Environment RIDS. Deliverables include, but are not limited to, the following:

<u>Deliverable (E = Electronic via Link to a Document Management System)</u>	<u>Due</u>
A. <u>Regulatory Requirements</u>	<u>Regulatory Due Date</u>
1. Water Appropriation Report (H)	March 1
2. Annual Hazardous Waste Generator Reports (E) and (H)	March 1
3. Superfund Amendments and Reauthorization Act (SARA) Title III, Tier II Reports to Agencies (E) and (H)	March 1
4. Emission Inventory Questionnaire to Texas Commission for Environmental Quality (TCEQ) for Big Hill (E)	March 31

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|--|----------|
| 5. Emission Inventory Questionnaire to Texas Commission for Environmental Quality (TCEQ) for Bryan Mound (E) | March 31 |
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Deliverable (E = Electronic via Link to a Document Management System)

Due

- | | |
|---|---------------------------|
| 6. Toxic Release Inventory (TRI) Form R to Agencies (E) | As Required by July 1 |
| 7. Pipeline T-4C Reports to Railroad Commission of Texas (RCT) (H) | As Required by November 1 |
| 8. Final Discharge Monitoring Reports (Hydrostatic) to LDEQ (H) | As Required |
| 9. Corps of Engineers Section 10 and Section 404 Permit Applications (H) | As Required |
| 10. General Permit Review Against Projects (H) | As Required |
| 11. Discharge Permit Applications/Modifications (H) | As Required |
| 12. Air Emissions Permit Applications/Modifications (H) | As Required |
| 13. NEPA Documentation/Evaluations/Categorical Exclusions (CXs)/Environmental Assessments (EAs) (E) | As Required |
| 14. Fee Payments, Permit Usage, and License Fee (E) | As Required |
| 15. Environmental Incident Reports (Spills, Noncompliances, Releases) (H) | As Required |
| 16. Drinking Water Monitoring Plan (TCEQ Compliance) (E) | As Required |
| 17. Drinking Water Noncompliance Public Notifications (E, H) | As Required |

<u>Deliverable (E = Electronic via Link to a Document Management System)</u>	<u>Due</u>
<u>B. DOE Headquarters Requirements</u>	<u>DOE Due Date</u>
18. Quarterly Upload of Discharge Monitoring Reports Data to EPA's NetDMR for approval (E)	As Required
19. Questionnaire on FY 2018 Archeological Activities (E)	March 24 or As Activities Require
20. NEPA Supplement Analysis (E) and (H)	As Required
21. Environmental Monitoring Plan (E) and (H)	As Required, on a 5 year cycle
22. Environmental Conflict Resolution Questionnaire (E) and (H)	July 24 or As Required
23. Draft CY 2017 Site Environmental Report (E) and (H)	August 29
24. Final Draft CY 2018 Site Environmental Report (E) and (H)	August 14
25. Council for Environmental Quality Report into CARS (E)	December 10 or As Required
26. Executive Order 13287 Preserve America Report – Historic Properties (E) and (H)	As Required
27. Draft SPR Site Sustainability Plan (E)	3 weeks ahead of HQ Guidance
28. Annual SPR Sustainability Projects List Update and Management Briefing (E) and (H)	May 11
29. Annual Data Call Report on Status of EMS (E)	Per HQ Guidance

<u>Deliverable (E = Electronic via Link to a Document Management System)</u>	<u>Due</u>
<u>C. Local Requirements</u>	<u>Local Due Date</u>
30. Environmental Advisory Committee Annual Report (H)	April 28 or As Required
31. Publish Environmental Instructions Manual (E)	As Required
32. ES&H Standards Set Update (E)	October 31 or As Required January 30 or As Required April 30 or As Required, July 31 or As Required
33. ISO 14001-2015 Surveillance Audit (E)	May 31
34. ISO 14001-2015 Management Review (E)	January 31, July 30 or As Required
35. Environmental CAS Update (E)	August 31 or As Required
36. Project Review Environmental/Sustainability Slides (E)	As scheduled, on a Quarterly basis
37. Weekly Environmental Report (E)	Weekly, Mondays Noon
38. Draft Budget and Schedule FY 2019 SPR Sustainability Projects List (E)	April 13
39. Final Budget and Schedule FY 2019 SPR Sustainability Projects List Initiatives (E)	May 11
40. Final Stormwater Pollution Prevention Plan – Chapter 8 SPR Pollution Prevention Plan (E) and (H)	As Required
41. Provide Input for SPR Annual Report and FE Annual ES&H Data Call	As Required
42. Provide Report on Waste Diversions Rates (E)	Quarterly

Deliverable (E = Electronic via Link to a Document Due
Management System)

- | | |
|---|-------------------------------------|
| 43. Provide quarterly Self Assessment of M&O's Environmental Division Performance (E) | 5 Working Days after end of Quarter |
| 44. RCRA Section 3016 Inventory Biennial Report (E) | As Required |

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.J
 PERFORMANCE AREA: Environment
 FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Sustainable Environmental Goals			
a. Pollution Prevention and Waste Reduction.			
(1) Construction and Demolition (C&D) Materials and Debris.	(1) Divert at least 50% of construction and demolition materials and debris.	(1) 50%	(1) N/A

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve


1. TITLE: Life Extension 2 Program

2. WORK AUTHORIZATION NO.: 2019-1.A 3. REVISION: 0

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$92,764,258

6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization Directive

Life Extension 2 Program

I. DESCRIPTION OF WORK

The Life Extension 2 Program Work Authorization Directive (WAD) provides for the management, support, and execution of those activities leading up to and including projects to correct known electro-mechanical issues at the four Strategic Petroleum Reserve (SPR) storage sites. This WAD includes engineering, project planning, and integration in compliance with DOE Order 413.3B, Program and Project Management For The Acquisition of Capital Assets.

A. Planning

The Management and Operating (M&O) Contractor is responsible for the performance of the assigned Life Extension 2 tasks, as well as the effective coordination of other project participants. The basis for performance of the aforementioned tasks shall be the Critical Decision-1 (Approve Alternative Selection and Cost Range) and Critical Decisions-3A, 3B, and 3C (Approved Long Lead Procurement) documentation.

B. Execution

In accordance with the Tailoring Strategy contained in the Project Execution Plan for CD-1, the sub-projects comprising the Life Extension 2 Program will each be processed for approval of Critical Decision-2 (Approve Performance Baseline) and Critical Decision-3 (Approve Start of Construction or Execution). The approval of the sub-projects' CD-2/CD-3 is targeted to be accomplished in FY 2020. An additional early works CD-3C package (CD-3B for Bayou Choctaw) is planned to be approved in FY 2019 for the preparation scopes at each site. Earned Value Management System Certification for the Life Extension 2 Program will be required prior to the CD-3 approval phase. The additional scope reflected in the engineering re-plan effort includes additional wells at three SPR sites, inundation and subsidence prevention at one SPR site, and degas tie-ins at three SPR sites.

The M&O Contractor shall perform the following activities:

1. Provide Project Management support to the DOE Federal Project Director, and perform an overall integration role.
2. Coordinate the efforts of other DOE Prime Contractors who may be engaged in Life Extension 2.
3. Commence mobilization and initiation of the Life Extension 2 Program.
4. Commence Preliminary Design, based on Conceptual Design Report of the CD-1 phase.
5. Perform procurement of Long-Lead or Mission Critical equipment, per the approved CD-3A, CD-3B, and CD-3C plans.
6. Achieve EVMS self-certification in FY 2019 and adhere to established Earned Value Management System.
7. Prepare documentation for Critical Decision 2 and Critical Decision 3 approval.
8. Support the Federal Project Director as the approval documentation of item 7 above is reviewed by the Office of Project Management.

II. DELIVERABLES

Deliverables for projects assigned to the M&O Contractor include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Project Status Report (includes cost and schedule status, safety performances, etc.) (E)	Monthly, and as required at each Quarterly Project Review
2. Interface Meeting Minutes (E)	Weekly or more as required
3. Provide support to the DOE Federal Project Director for monthly reporting in Project Assessment and Report System II as appropriate per DOE O 413.3 (E)	First business day of the month after close-out of previous month's reporting period
4. Life Extension 2 Project Review	Monthly, held on the second Thursday of each month to be scheduled per the schedule of the Project Manager
5. High level project update (E)	Weekly, by noon each Monday
6. Conduct 30% Design Review for WH Secondary Well	Per agreed upon A-E scheduled milestone
7. Conduct 30% and 60% Design Model Reviews, with associated engineering deliverables	Per agreed upon A-E scheduled milestone
8. Perform Process Hazards Analysis Reviews (dependent on sequencing in 2018), with associated engineering deliverables.	Per agreed upon A-E schedule milestone
9. Issue 30% and AFC Estimates	Per agreed upon A-E scheduled milestone
10. Complete Environmental Assessments	September 30, 2019
11. Update Project Execution Plan and other Critical Decision deliverables as needed	As Requested
12. Smart Plant Foundation by August 20, 2018	At Specified Date

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM and/or STRETCH	TARGET
1. Master LE2 Project Milestone Schedule - Ensure effective execution through management and control of project milestones.	a. Percentage of each fiscal year's Level 3 milestones that are completed in compliance with established Control Milestone Change Requests (CMCRs) [measured in both FY 2018 and FY 2019).	a. Complete at least 90% of all Level 3 milestones by the end of the fiscal year	a. Complete at least 95% of all Level 3 milestones by the end of the fiscal year.

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
2.Critical Milestones	Effective Management of Major Subcontractors. (Measured in FY 2019).	Subcontractor’s Project Controls system EVM-compliant into Contractor’s validated Performace Baseline 6 months prior to DOE-HQ Prime Contractor EVMS certification commencement.	Subcontractor’s Project Controls system EVM-compliant into Contractor’s validated Performace Baseline 3 months prior to DOE-HQ Prime Contractor EVMS certification commencement.

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2019

<p>3. Cost Control - Ensure activities leading up to CD-2/CD-3 are performed in a cost-effective manner in accordance with initial baselines</p>	<p>In the period up to CD-2/CD-3, the following are the major cost categories to be managed by the M&O Contractor:</p> <p>5 Control Accounts:</p> <ul style="list-style-type: none"> a. New Orleans b. Bayou Choctaw c. West Hackberry d. Big Hill e. Bryan Mound <p>Baseline Execution Index (BEI) > 95%</p>	<p>90% of Active (at least 25% complete) or Completed Control Accounts with Cumulative Cost Performance Index (CPI) greater than or equal to 0.95 of the approved baseline budget..</p>	<p>90% of Active (at least 25% complete) or Completed Control Accounts with Cumulative Cost Performance Index (CPI) greater than or equal to 0.90 of the approved baseline budget.</p>
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III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
4. Design Performance - Ensure effective management of A-E such that performance meets standard of care of industry leading A-E firms.	Design/Model Reviews (measured in both FY 2018 and FY 2019)	At least 90% completed within Design Management Plan (DMP) baseline schedule.	At least 80% completed within Design Management Plan (DMP) baseline schedule.
4.a. Design Performance - Ensure effective management of A-E such that performance meets standard of care of industry leading A-E firms.	Design Error Rate	Change Orders to Construction Contractors due to Design Errors or Omissions less than 2% of aggregate total of value of all construction contracts based on A-E designs.	Same as above, but less than 4%. To be included in second multi-year PEMP as determination can only be complete at the end of construction – in FY 2022.

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.A

PERFORMANCE AREA: Technical Support and Management – Life Extension 2

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
4.b.Design Performance - Ensure effective management of A-E such that performance meets standard of care of industry leading A-E firms.	Accuracy of Estimate	Within 7.5% of Independent Cost Estimate (ICE).	Within 15% of ICE FY 2019: 8.5%
5. Master LE 2 Project Milestone Schedule.	Percentage of each fiscal year’s Level 3 milestones that are completed in compliance with established Control Milestone Change Requests (CMCRs)	Complete at least 90% of all Level 3 milestones by the end of the fiscal year and at least 80% within 30 days of scheduled date.	FY 2017: 60% FY 2018: 50% FY 2019: 20%
6. Critical Milestones – Ensure overall schedule compliance with critical milestones	Completion of Process Hazard Analysis	As Milestoned	30 days prior to Milestone

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

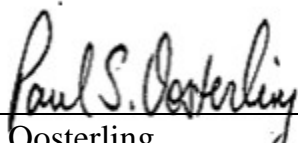
TO


Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve

- 1. TITLE: Maintenance Program
- 2. WORK AUTHORIZATION NO.: 2019-1.M 3. REVISION: 0
- 4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$29,790,627
Change in Inventory: TBD\$954,044

6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveMaintenance ProgramI. DESCRIPTION OF WORK

The Contractor shall provide the resources required to maintain the facility, equipment, vehicles, utilities, systems, and infrastructure to support drawdown readiness, drawdown, crude oil sales, and any other site activities in a safe, cost-effective, efficient, timely, and environmentally compliant manner.

Responsibilities include repair, modifications, installations, preventive maintenance, corrosion control, Recovery Program, predictive maintenance, corrective maintenance, provisioning, cataloguing, calibration, and grounds maintenance.

The Contractor, in the performance of assigned responsibilities, shall ensure compliance with SPRPMO O 433.1B, Maintenance Management Program.

The Contractor shall perform preventive maintenance in order to minimize facility or equipment failure and to enhance the reliability of systems and equipment essential for operations. The Contractor shall perform corrective maintenance to support operational requirements, and other non-compliant conditions, and establish predictive maintenance techniques to identify possible failures.

The Contractor in the process of maintaining the facilities/support equipment shall calibrate applicable equipment, evaluate current equipment configuration; remove and excess unneeded equipment, perform equipment modification, upgrades, and overhauls to include Recovery Program equipment.

The Contractor shall establish a support system that measures, evaluates, and reports on the performance of maintenance activities and the maintenance of Government assets that are leased.

The Contractor will ensure Lessees of Government-owned SPR assets perform all maintenance in accordance with the latest Government-approved lessee maintenance plan or corrective action plan approved by DOE.

The Contractor will conduct the required maintenance programs for all Government-owned equipment and assets, including both on-site and off-site locations.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Monthly Maintenance Status Report (E)	15 th of the month following data cut-off date
2. Predictive Maintenance Quarterly Status Report (E)	31 calendar days following the end of the quarter
3. Site Maintenance Plan, including prioritized list of projects (E)	Each year by January 31
4. Quarterly Pump/Motor Confidence Index (PMCI) Critical Equipment Test Run Data (E)	15 th of the month following the end of the quarter

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.M
 PERFORMANCE AREA: Maintenance Program
 FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Execute a Maintenance Program at the SPR sites to support a high level of operational readiness.	The calculated Maintenance Performance Appraisal Report (MPAR) percentage reported in the monthly Maintenance Status Report.	≥ 95 point fiscal year average SPR-wide and ≥ 94 point fiscal year average at each SPR site	≥ 98 point fiscal year average SPR-wide and ≥ 95 point fiscal year average at each SPR site

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve


1. TITLE: Major Maintenance Projects

2. WORK AUTHORIZATION NO.: 2019-1.Z 3. REVISION: 0

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$25,296,079

6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveMajor Maintenance ProjectsI. DESCRIPTION OF WORK

The Major Maintenance Projects Program provides for the construction of Major Maintenance-funded projects. A Major Maintenance project is defined as a single undertaking involving engineering, procurement, construction, fabrication, installation, and testing or combinations thereof, which may materially add to the value of or prolong the life of a building, structure, or physical system. Major Maintenance Projects shall have a Total Estimated Cost (TEC) of \$100,000 or greater.

A. Planning

The Management and Operating (M&O) Contractor is responsible for the effective short- and long-range planning and coordination of the Major Maintenance Program. This will require the development of the appropriate documents such as Construction Project Data Sheets, Task Scopes, Enterprise Change Proposals (ECPs), Definitive Engineering Scopes (DESs), Descriptions of Work (DOWs), and the necessary budget documents to fund these tasks. The process for identifying, sponsoring, coordinating and planning the execution of Major Maintenance tasks that are required for the Strategic Petroleum Reserve's (SPR's) mission to be carried out is the M&O Contractor's responsibility. The M&O Contractor shall ensure all SPR required Environmental, Safety, Health (ES&H) and Security requirements are identified and included in technical description of tasks for the Major Maintenance Program.

The M&O Contractor is responsible for implementing, coordinating, and reporting the construction projects assigned to the M&O Contractor at the various SPR sites as well as the direct interface with the Department of Energy (DOE). The M&O Contractor's respective field organization shall directly interface with DOE. The M&O Contractor shall manage the assigned Major Maintenance tasks to assure their timely completion and shall initiate, with DOE approval, timely and appropriate actions to keep the construction contractor on schedule. The M&O Contractor shall document work progress

and actions taken to regain schedule. The M&O Contractor shall assure that all applicable ES&H regulations and procedures are complied with on assigned construction tasks. The M&O Contractor shall implement a Quality Program which effectively ensures that the assigned construction is accomplished in accordance with the contract requirements. The M&O Contractor's respective field organization shall directly manage the assigned construction activities which includes oversight of the contractor quality programs to ensure construction in compliance with the contract requirements as well as oversight of the contractors' safety programs to ensure compliance with contract requirements. The construction staff responsible for safety oversight must be knowledgeable of DOE and Occupational Safety and Health Administration standards. As required, the M&O Contractor shall provide Title III inspection services for the management of assigned construction. The Architect-Engineer (A-E), under separate prime contract to the Government, will provide Title III support limited to review of submittals, resolution of questions with the design, review of contract deviations and waivers, and special engineering services to address design problems and differing site conditions. The A-E Title III will be provided under the direction of a DOE Contracting Officer's Representative or DOE Project Engineer.

The M&O Contractor shall perform the following activities:

1. Conform to the funding and scheduling approved by the DOE in its fiscal year funding guidance and approved project authorization.
2. Before February 1, 2019, finalize the FY 2021 Major Maintenance Program and Schedule Baseline with approval of all baseline ECPs by the Project Change Control Board (PCCB). By July 1, 2019, finalize all Control Milestone Change Requests (CMCRs) with approval by the Assistant Project Manager for Systems and Projects.
3. Update the current Major Maintenance Program Baseline if approved changes occur.
4. Submit ECPs for FY 2021, Major Maintenance Program tasks no later than June 30, 2019, approved by PCCB in accordance with schedule. Deliver via workflow for review, comments, and concurrence.

5. Complete DOW/DES for FY 2021 Major Maintenance Program tasks, if required, no later than September 30, 2019, in accordance with schedule. Issue electronically for review, comment, and concurrence as applicable.
6. Maintain Cost Tracking System via Construction Cost Tracking Application (CCTA).
7. Construct the assigned projects in accordance with approved plans and specifications.
8. Ensure that approved designs of projects assigned to the M&O Contractor are not changed, except when necessary to:
 - a. Correct a design deficiency;
 - b. Correct differing site conditions;
 - c. Realize a substantial life-cycle cost benefit; or
 - d. Comply with new ES&H or Security regulations.
9. Provide construction management and inspections on the construction projects assigned to the M&O Contractor in accordance with DOE/SPR Orders. The M&O Contractor shall perform the following activities:
 - a. Support A-E Design Reviews.
 - b. Constructability Design Reviews.
 - c. Technical Evaluations of Proposals.
 - d. Cost Estimating.
 - e. Contractor Submittal Review.
 - f. Technical Coordination.
 - g. Program Planning and Scheduling.

- h. Management of Construction Projects assigned to the M&O Contractor to include:
 - (1) Contractor Surveillance.
 - (2) Inspection.
 - (3) Safety Inspection.
 - (4) Manage Government-Furnished Property (GFP).
 - (5) Management Oversight of Contractor-Furnished Property (CFP).
 - (6) Coordination of contractor activities with site operation and closeout documentation.
 - (7) Control Construction Contract changes.
 - (8) Support and/or participation in Readiness Reviews and System Startups.
 - (9) Ensure construction is accomplished on schedule and in accordance with approved designs.
 - (10) Pre-bid site visits and Pre-construction Meetings.
 - (11) Project Status.
 - (12) Cost Control Reports via CCTA.
 - (13) Checkout, Testing, and Startup, as required.
 - (14) Use and Possession.
- i. Provide as required for projects assigned to the M&O Contractor support equipment and contracted third-party services.

Approved Major Maintenance Projects and Estimated Budget are reflected in the latest approved version of the M&O 2019 AOP. The current AOP totals are \$10,023,658 for construction and \$2,723,000 for Construction Management for a total of \$ 12,746,658.

The following projects are authorized:

MAJOR MAINTENANCE

TASK NUMBER

TASK DESCRIPTION

FY 2018 AOP

TOTAL MAJOR MAINTENANCE

II. DELIVERABLES

Deliverables for projects assigned to the M&O Contractor include the following:

Deliverables (E = Electronic via Link to a Document Due
Management System, H = Hardcopy)

- | | |
|--|--|
| 1. Construction Management deliverables include the following: | |
| a. Project Status Report (includes schedule status, safety performances, etc.) (E) | As required at each Project Review |
| b. Weekly Site-Specific Report from Construction Management to each respective Senior Site Representative and DOE Project Engineer listing Construction status, concerns, problems, and proposed resolutions of problem areas, as required (E) | 9 a.m., First Working Day of the Week, as required |
| c. Latest Revised Estimate (LRE) via CCTA (E) | Update Electronically and Present at each Project Review (as needed) |
| d. Construction Interface Meeting Minutes (E) | As Required |
| e. CM-1 Report updates via CCTA (E) | As Required |
| f. Checkout, Test, and Startup Records (E) and (H) | As Required |
| g. GFE, CFE, and Vendor Data Schedules (E) | As Required |
| <u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u> | |
| h. Complete procurement package for DOE awards (E) and (H) | Per Established Level 3 Milestones, as required |

III. PERFORMANCE MEASURES

None.

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve

1. TITLE: Northeast Gasoline Supply Reserve (NGSR)

2. WORK AUTHORIZATION NO.: 2019-1.Q 3. REVISION: 0

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$28,000

6. DESIGNATED OFFICIAL: *Paul S. Oosterling*
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: *Sally Leingang*
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization Directive

Northeast Gasoline Supply Reserve

I. DESCRIPTION OF WORK

Perform all related tasks necessary to accomplish quality and quantity verification as associated with the acquisition, sales, and transportation of petroleum stored in the Northeast Gasoline Supply Reserve (NGSR).

- A. The Contractor shall, in accordance with written directives, perform the following operations activities:
1. Manage third-party inspection contract in performing the following:
 - a. Conduct quarterly, or by request, product quantity certification, including tank gauging, and provide pertinent storage documentation electronically, assuring all is within applicable current petroleum standards and meet contractual requirements.
 - b. Observe or perform all sampling required and requested while assuring certified laboratories can perform all testing required.
 - c. From quality test results, determine and confirm that all Department of Energy (DOE) petroleum products meet or exceed specifications and contractual requirements.
 - d. Conduct testing of DOE petroleum product as requested, and assure all performed or observed testing is in accordance with approved test methods and meets contractual requirements.
 - e. For all modes of transporting and custody or title transfer of DOE petroleum products: observe sampling and testing or obtain test results; observe loading if applicable; determine and confirm proper quantities; assist in completing or obtain copies of the appropriate documentation and provide electronic copies; assure

all aspects of product movement are within contractual requirements.

- f. Assist the DOE designated Independent Auditor in inventory verification and sampling analyses.
 - 1. Maintain detailed records and publish monthly SPR inventory in the NSGR.

II. DELIVERABLES

Deliverables include the following:

Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

- 1. Provide certifications, inspection reports and associated documents in support of storage and movement of product, as required.

As Required

III. PERFORMANCE MEASURES

None.

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

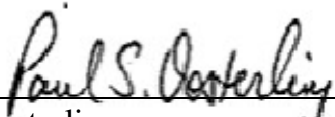
TO


Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve

- 1. TITLE: Northeast Home Heating Oil Reserve (NEHHOR)
- 2. WORK AUTHORIZATION NO.: 2019-1.Y 3. REVISION: 0
- 4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$108,000

6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveNortheast Home Heating Oil ReserveI. DESCRIPTION OF WORK

Perform all related tasks necessary to accomplish quality and quantity verification as associated with the acquisition, sales, and transportation of heating oil stored in the Northeast Home Heating Oil Reserve (NEHHOR).

A. The Contractor shall, in accordance with written directives, perform the following operations activities:

1. Manage third-party inspection contract in performing the following:

- a. Conduct quarterly, or by request, product quantity certification, including tank gauging, and provide pertinent storage documentation electronically, assuring all is within applicable current heating oil standards and meet contractual requirements.
- b. Observe or perform all sampling required and requested while assuring certified laboratories can perform all testing required.
- c. From quality test results, determine and confirm that all Department of Energy (DOE) home heating oil products meet or exceed specifications and contractual requirements.
- d. Conduct testing of DOE home heating oil products as requested, and assure all performed or observed testing is in accordance with approved test methods and meets contractual requirements.
- e. For all modes of transporting and custody or title transfer of DOE home heating oil products: observe sampling and testing or obtain test results; observe loading if applicable; determine and confirm proper quantities; assist in completing or obtain copies of the appropriate documentation and provide electronic copies;

assure all aspects of product movement are within contractual requirements.

- f. Assist the DOE designated Independent Auditor in inventory verification and sampling analyses.

- 2. Maintain detailed records and publish monthly SPR inventory in the NEHHOR.

II. DELIVERABLES

Deliverables include the following:

Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

- 1. Provide certifications, inspection reports and associated documents in support of storage and movement of product, as required.

As Required

III. PERFORMANCE MEASURES

None.

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

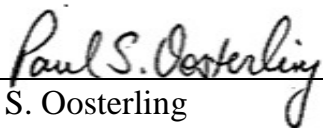

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve

- 1. TITLE: Operations, Cavern Integrity, and Workover
- 2. WORK AUTHORIZATION NO.: 2019-1.L 3. REVISION: 0
- 4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$39,136,088

- 6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity
- 7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveSection A – OperationsI. DESCRIPTION OF WORK

- A. The Contractor shall, in accordance with written directives, perform the following New Orleans operations activities:
1. Provide management and support necessary to operate the Strategic Petroleum Reserve (SPR) facilities in a safe, effective, efficient, timely, and environmentally compliant manner consistent with Department of Energy (DOE) objectives and requirements ensuring compliance with current DOE Conduct of Operations regulations, Occurrence Reporting and Processing System requirements, and DOE Corporate Operating Experience Program.
 2. Direct operations activities to ensure that all phases of operational readiness are scheduled and maintained with particular emphasis on drawdown-critical activities.
 3. Provide oversight of fluid movement operations (crude oil, raw water, and brine).
 4. Ensure that site-specific configurations and operations procedures at all sites are in compliance with established design and performance criteria, incorporating proposed conceptual and detailed designs for site modifications as necessary.
 5. Manage the SPR day-to-day execution of solution-mining, oil fill, storage, removal, drawdown, oil exchanges, abandonment, and operations.
 6. Coordinate the off-loading and lifting of oil at commercial terminals and its temporary storage in DOE and/or commercial tanks.

7. Prepare crude oil loss investigation reports to include findings and recommendations for losses that exceed 100 net barrels per incident to support the Crude Oil Accountability Review Board.
8. Participate in the planning and execution of drawdown simulations, Systems Test Exercises (STEs), Recovery Program Exercises (RPXs), readiness reviews, exercises, and withdrawals of SPR oil, utilizing computer models (e.g. PCTM) when possible to analyze operational scenarios. Develop and implement formal Drawdown Readiness Program Plan, to include training and performance evaluation components.
9. Manage the Operations Control Center for gathering and disseminating data on operations and maintenance of the SPR sites. Operate the Command Center during drawdown, emergencies, and exercises.
10. Operate communications system established by the States of Louisiana and Texas for mutual notification of excavation or other construction activities which could possibly threaten underground utilities or pipelines.
11. Manage and operate the SPR Aviation Program in accordance with the Aviation Implementation Plan.
12. Develop and maintain computerized operations models for drawdown, distribution, and terminalling activities.
13. Ensure recovery capability for drawdown, to include equipment, personnel training, and all required procedures/guidelines.
14. Ensure that the SPR on-site laboratories and oil sample storage facilities are maintained in an operational readiness state to support SPR operations.
15. Maintain detailed records and publish monthly the SPR inventory in underground cavern storage, aboveground storage tanks, and cross-country and on-site pipelines, commercial terminals, and leased facilities.
16. Develop and implement the 10-year cavern and gas regain sampling programs, including a monthly schedule update on these programs. Also, provide technical support, as requested, for Program Office Contract for Crude Oil Assay Analysis Services.

17. Manage the SPR crude oil quality control program, including those actions associated with sampling, analysis, metering, data recording and reporting, and upgrades/downgrades.
18. Maintain status summary of terminal storage, costs, throughput capability, and operational variances, perform Terminal Distribution Readiness Assessments every 2 years (or as needed), and assist in creation of written report.
19. Implement and manage those actions involved in the inspection and verification of the quantity of crude oil during its receipt, handling, transport, storage, and custody transfer. Perform trend analysis of oil movement variances.
20. Manage the SPR Energy Management Program in accordance with Federal laws, DOE Orders, and other directives. This program applies to the management of all energy resources, including electricity, water, and fuels (diesel, gasoline, propane, and natural gas).
21. Collect, analyze, and maintain utility usage data, to include real-time monitoring and forecasting of electrical usage/demand, load management, and utility usage/cost study activities.
22. Define and implement energy efficiency and transportation programs, to include facilities surveys and energy awareness programs.
23. Ensure renewable energy purchases are at levels consistent with current guidelines in EPACT 2005, Executive Orders 13423 and 13514, and other directives.
24. Support negotiations with, and administer utility power contracts.
25. Implement vapor pressure management plans, to include sampling and other field measurement programs. This includes real-time Degas Plant data on the Vapor Pressure Program.
26. Assist in preparation of annual operations-related budgets and conduct operations in accordance with approved funding allocations.

27. Manage the operation of the Foreign Trade Zone (FTZ) activities at the DOE SPR, to include customs compliance reporting and development of the Annual FTZ Report.
28. Maintain and keep current the SPR Crude Oil Sample Management Organizational System (COSMOS).
29. Support DOE in negotiations, awards, and contract administration, including drawdown, oil sales/purchase, petroleum product purchase/storage/sales, exchange contractors, lease agreements, terminal contracts, and connection agreements.
30. Maintain and keep current pigging frequency documentation to enable analysis of data and history on both DOE-operated and DOE-leased pipelines.
31. Conduct successful quarterly tests for a minimum of 1.5 consecutive hours (unless more run-time is needed to reach operating temperature or stable flow) on drawdown-critical pumps and motors. Also, conduct successful quarterly tests on drawdown-critical equipment to include all meters, provers, samplers and densitometers.
32. Provide notification of and monitor off-site drilling and seismic activities in the vicinity of the sites.
33. Manage the Superfund Tax Liability and the Oil Spill Liability Trust Fund Tax, providing current reports as needed and remaining up to date on law changes and reporting requirements for drawdown and oil sales.
34. Manage the Texas Coastal Protection Fee and Port/Waterway Fees, providing reports as needed, and proofing invoices for rebilling to oil purchasers.
35. Manage the day-to-day activities associated with the oil logistics programs. Maintain and update the SPR Website with the oil logistics, delivery, and receipt information, perform reconciliations of quantities owned and received, and quality differentials.
36. Maintain and update as necessary the Crude Oil Valuation Assessment Tracking System (COVATS), Platts and Argus oil pricing/information service as required by DOE requirements.
37. Support DOE annual Lease Evaluation of leased pipelines and terminals by monitoring and evaluating Lessee operations and maintenance

activities and submitting written reports, including compiling and organizing final assessment report with all associated photo media.

38. Manage contracts, including third-party inspection, H₂S scavenger procurement, and crude oil trading consultant as required by DOE.
 39. Conduct Annual Assessment of Terminals Emergency Power Generation as required by DOE.
 40. Review M&O Contractor Procedure Publications relating to Crude Oil Operations and Management on an annual basis, and update if applicable.
 41. Provide review and input/updates for the FE Headquarters published yearly "SPR Annual Report for the Calendar Year."
 42. Assist DOE in contract re-solicitations for DOE Leased Assets and for procurement of Terminal Readiness and Drawdown Services.
 43. Maintain and keep current the SPR DocuSign digital signature service (or other service) approving crude oil measurement documentation.
 44. Provide support to DOE by M&O contractor procurement of Crude Oil Terminalling Services.
- B. The Contractor shall, in accordance with written directives, perform the following site operations activities:
1. Operate the SPR facilities in a safe, effective, efficient, timely and environmentally compliant manner in accordance with Levels I, II and III criteria, and the DOE-approved Operating Manuals and Procedures, ensuring compliance with current DOE Conduct of Operations regulations, Occurrence Reporting and Processing System requirements, and DOE Corporate Operating Experience Program.
 2. Perform integrated operational and site planning to assure adequate preparation, necessary resources, and formal scheduling of all SPR activities to achieve program objectives.
 3. Ensure that site-specific configurations and operations procedures are in compliance with established design and performance criteria.

4. Manage the site day-to-day execution of fluid movements to include oil fill, oil recirculation, brine disposal, drawdown, oil sales, emergency and non-emergency exchange, and emergency preparedness.
5. Participate in the planning and execution of drawdown simulations, exercises, STEs, and withdrawals of site oil.
6. Operate, test, and maintain the SPR pipelines in accordance with State and Federal regulatory requirements.
7. Perform Control Room operations which include monitoring and operation of Control Room equipment, communications, and maintenance of logs on all pertinent events occurring on site.
8. Manage remote operations that require field monitoring such as Raw Water Intake Structures.
9. Conduct all assigned Recovery operations to include planning, site preparation/decommissioning, equipment usage/warehousing, including equipment cleaning and preservation and personnel utilization/training.
10. Assist with all field activities related to vapor pressure management programs.
11. Manage and operate the SPR on-site laboratories and the Big Hill crude sample storage facility, providing oversight and assuming responsibility and accountability for the management and oversight functions in the laboratory, in support of SPR programs for crude oil quality and environmental requirements.
12. Ensure that proper permits are issued to maintenance and subcontractor personnel and that safety and environmental procedures are followed.
13. Coordinate crude oil movements with pipeline operators ensuring the sites are fully informed of schedules.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Daily Site Report and Degas Plant Readiness Report to include Operations, In-Line Pump and Motor Status, and Daily Oil Movements and any crude oil out of specification (E)	Daily by 0700 hours
2. Degas Plan Performance Tracking (E)	Daily by 0900 hours
3. SPR Oil Inventory Report (E)	On or before the 10th working day following report month
4. Weekly FE Webpage Crude Oil Inventory Information Status Report as required (E)	Monday by noon
5. Reconciliation Report of SPR Crude Oil Inventory Stored in Leased Facilities and Commercial Terminals (E)	5 calendar days after receipt of report
6. Crude Oil Transfer Measurement and Variance Investigation Report, including trending analysis (H)	30 calendar days after month end
7. Oil Movement Variance Trend Analysis (E)	End of calendar year, due February 1
8. Notification Report of SPR Crude Oil Variances (E)	3 calendar days after completion of movement
9. Reconciliation Report of Terminal Invoices to ensure accuracy (E)	4 days after receipt of invoice
10. Reconciliation of accuracy of lease agreement of monthly invoices/statements (E)	5 workdays after receipt of report/invoice
11. Written waiver request on crude oil quality anomalies (E)	2 workdays of initial verbal request

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
12. Quarterly Report by Site and Cavern on Crude and Oil Streams Received (E)	15 calendar days after quarter end
13. Cargo Preference Compliance Status Report as requested (E)	Quarterly, 15 calendar days following report period
14. Year-End Crude Oil Inventory Report (E)	The last workday of January each year for the period ending December 31
15. Drawdown and Distribution, Receipts and Fill Configuration Charts (H)	End of month following the previous quarter
16. Drawdown Readiness and Capability (RECAP) Report/SPR Exchange Readiness Report (SPREX) (E) and (H)	20 calendar days after quarter end
17. Provide FTZ Annual Report (E)	45 calendar days after end of calendar year
18. Energy Management Activities:	
<ul style="list-style-type: none"> • Updated Energy Management Plan Report and Consolidated Energy Data Report (CEDR) (E) and (H) • Energy Independence Security Act (EISA) Section 432 or as amended (E) and (H) 	<p>By Milestone date</p> <p>Each year by June 15</p>
19. Status Report of Implementation of E2P2 Program (E)	15 calendar days after quarter end
20. Updated Drawdown Implementation Manual (DIM) and Exchange Manual (E) and (H)	Biennially by September 30
21. Completion of an EAGLE or PRIDE Exercise Report (E) and (H)	By Milestone dates
22. Updated Drawdown Readiness Plan (5-Year STE Matrix) (E) and (H)	Each year by August 31

Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)Due

- | | |
|---|--|
| 23. Interim System Test Exercise Reports indicating the M&O contractor's initial assessment of achieving exercise objectives (E) | Within 20 calendar days after completion of exercise |
| 24. Planning document for System Test Exercise and Tabletop Exercises, including briefing to senior staff (E) and (H) | 60 calendar days prior to exercise initiation |
| 25. Results of various System Test Exercises: | |
| <ul style="list-style-type: none"> • Tabletop Exercise Reports (E) | 45 calendar days after exercise briefing |
| <ul style="list-style-type: none"> • Final Completion Reports for STEs, including briefing to senior staff (E) | Within 60 calendar days after exercise completion |
| <ul style="list-style-type: none"> • Final Reports for Recovery Test (E) | 75 calendar days after exercise |
| 26. Cavern Degas Completion Report (E) | Within 30 days of completion of Degas operation at each cavern |
| 27. Pipeline Leak Detection Report | |
| <ul style="list-style-type: none"> • Static (E) and (H) | Annually, 30 calendar days after test |
| <ul style="list-style-type: none"> • Dynamic (E) and (H) | Biennially, 30 calendar days after test |
| 28. A monthly site Fire Protection Inspection Report to each respective SSR (E) | 15 th calendar day of each month |
| 29. Quarterly National Pollutant Discharge Elimination System (NPDES) Discharge Monitoring Reports (DMRs) to the SSR and the appropriate State Agency (H) | 18 calendar days after the quarter end |
| 30. Quarterly Aviation Usage Report in the Federal Aviation Interactive Reporting System (FAIRS) and Aviation Performance Data (E) | 30 calendar days after end of quarter being reported |
| 31. Annual 10-Year Cavern Sampling Plan (E) and (H) | July 1 |

Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)Due

- | | |
|--|---|
| 32. Record Exchange Program Premium Barrels monthly in COVATS, if applicable | 8th workday of each month |
| NOTE: These receivable barrels must be distinguished from any other receivables listed, such as Exchange barrels) (E) | |
| 33. Provide report identifying crude oil prices for Exchange base contract, crude substitution, and premium barrels, if applicable | 5th workday of each month |
| NOTE: Include crude stream and barrel type (E) | |
| 34. Provide notification when Exchange return oil volumes reach contracted stipulated percentage, if applicable (as it relates to Letters of Credit Reduction) (E) | Within 7 business days of achieving targeted percentage |
| 35. Annual Assessment of Terminals Emergency Power Generation (E) and (H) | By Milestone date |
| 36. Weekly Cavern Inventory Status Report (E) | Every Wednesday by 10 a.m. |
| 37. Weekly Oil Sales Report (E) including related supplemental reports, when required | Every Wednesday by 11 a.m. |
| 38. Daily Oil Sales schedule (E) | Every day by 9 a.m. |
| 39. Provide Bryan Mound Electrical Power Invoice validation form within 7 days of M&O contractor receipt of invoice for review | Within 7 days of invoice receipt |

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.L

PERFORMANCE AREA: Section A – Operations

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Drawdown Rate – Ensure the SPR’s capability to respond to an energy emergency consistent with the established drawdown criteria.	90-day drawdown rate in barrels per day (12-month average)	N/A	Meet drawdown rate of 4.22 Million Barrels Per Day (12-month average)
2. Perform crude oil deliveries from/to SPR in accordance with approved withdrawal/fill plans.	Successfully execute 100 percent of the required oil movements, as required, including drawdown, oil sales, exchange, and emergency relief.	N/A	100 percent

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveSection B – Cavern Integrity and WorkoversI. DESCRIPTION OF WORK

- A. The Contractor shall, in accordance with written directives, perform the following New Orleans Cavern Integrity and Workover activities:
1. Manage and operate the Strategic Petroleum Reserve (SPR) cavern integrity and workover program in a safe, effective, efficient, timely and environmentally compliant manner consistent with Department of Energy (DOE) objectives and requirements ensuring compliance with current DOE Conduct of Operations, and Occurrence Reporting and Processing System requirements.
 2. Ensure that site specific configurations and operations procedures at all sites are in compliance with established design and performance criteria.
 3. Support the day-to-day execution of the SPR Fluid Movement, oil fill, drawdown, oil sales, and exchange programs.
 4. Assure all the applicable regulatory requirements for the SPR wells, caverns, workovers, etc. are timely met.
 5. Develop workover procedures and schedules. Assure workover materials and subcontracts are ordered and ready when needed to support rig operations without delays. Initiate all work orders to support the approved workover schedule.
 6. Develop and recommend engineering solutions to downhole and wellhead problems.
- B. The Contractor shall, in accordance with written directives, perform the following site cavern integrity and workover activities:
1. Maintain the Government-owned caverns, brine disposal wells, and associated wellhead and downhole equipment in accordance with Levels

I, II, and III Criteria, and DOE-approved Operating Manuals and Procedures in a safe, efficient, and environmentally compliant manner.

2. Ensure that the DOE and leased workover rigs, wellheads, and downhole equipment are operated and maintained within their prescribed operational parameters and in compliance with all applicable DOE, SPRPMO, and Regulatory Orders.
3. Provide integrated cavern and workover planning to assure adequate preparation, necessary resources, and formal scheduling of all cavern and well activities to achieve program objectives.
4. Maintain an accurate and accessible well database, including downhole configuration details, drawings, sonar data, wireline information and other relevant data.
5. Monitor and analyze storage cavern and well data to ensure that caverns are operated in compliance with established design and performance criteria. Input daily site cavern data into cavern integrity monitoring software, CAVEMAN, using a standardized form for all sites.
6. Monitor and analyze disposal well data to ensure that wells are operated in compliance with established design and performance criteria.
7. Ensure that the SPR caverns, cavern wells, and brine disposal wells are operated, tested, and maintained in accordance with DOE Orders, and State and Federal regulatory requirements.
8. Ensure that proper permits are issued to workover and subcontractor personnel, and that safety and environmental procedures are followed.
9. Ensure that cavern pressures are closely monitored to identify report and address anomalous trends to assure integrity of the storage caverns. Upon identification of any anomalous trending, immediately establish 2-way communication with the DOE M&O APM and DOE Cavern Integrity management within 24 hours.
10. The SPR presently has certain wellbores with pressures between the cemented production casing and cemented intermediate casings. The contractor shall develop and maintain a program that monitors and improves these cemented casing annuli pressures. The contractor shall also prepare and submit a report to DOE on a quarterly basis.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Daily Cavern (E)	Daily
2. Daily Workover Activities (E)	Daily
3. Weekly Cavern Operations Report by Site (E)	Weekly, by noon Tuesday
4. Cavern Capacity, Inventory, Ullage, and Volumes Reports (E)	15 working days following end of month being reported
5. Quarterly Cavern Ullage Management Tool (E)	15 working days following the end of the quarter
6. Quarterly Disposal Well Report (E)	30 calendar days following the end of the quarter
7. Quarterly Casing Failure/Loss Report (E)	Annually
8. Annual Cavern Volume Report to include analysis technique used, permitted cavern capacity, actual cavern capacity, and permitted cavern volume (E)	Each year by January 31 (Permit requirement in accordance with Railroad Commission of Texas as required by Texas Rule 95)
9. Annual Cavern Creep Validation Report (E) and (H)	Each year by March 31
10. Cavern Mechanical Integrity Test Reports (E) and (H)	30 calendar days following end of test

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
11. Workover Completion Reports to the SSR and SPRPMO (E) and (H)	30 calendar days following completion of the workover
12. Workover Management Plan/Procedures (Workover Execution Plan) (E)	Final due 5 calendar days prior to commencement of work
13. Cavern Mechanical Integrity Test Procedures (E)	Final due 5 calendar days prior to commencement of work
14. Wireline Procedures (E)	Final due 2 working days prior to CRC, if held, or prior to work commencing if CRC not held
15. Cavern Pressure Control Validation (E)	Weekly, by noon Monday Quarterly by 5 working days following end of quarter
16. Inspection of downhole cemented casing with caliper surveys and video surveys if deemed necessary (E)	Not to exceed 10 years per DOE and State requirements
17. Texas Regulatory Requirements	
(a) Annual Well Monitoring Report Underground Storage in Salt Formations (H-10-H) (H)	Railroad Commission of Texas as required by Texas Rule 95
(b) Oil Well Potential Test, Completion or Recompletion Report and Log (W-2) (Rule 16 and 51) (H)	Railroad Commission of Texas as required by Texas Rule 95

Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)Due

- (c) Review sonar histories to assure any cavern due for survey to meet either DOE 10-year requirement or an agreed-upon deliverable and approach is performed. In addition, perform surveys as needed after a drawdown or when there is a major salt fall or other problem that may have caused a significant change in cavern configuration. (E) and (H)

Not to exceed 10 years or other agreed-upon durations

18. Louisiana Regulatory Requirements

- (a) Annual Brine Injection Report (UIC-10) (electronic link to web site as report is completed) (E)
- (b) Semiannual 29-M Cavern Safety Inspection (electronic link to web site as report is completed) (E)
- (c) Downhole Wireline Surveys, Sonars, Well Histories, and Work Resumes (UIC-17) (H)
- (d) Sonar Survey (performed every 5 years, or as soon as possible thereafter, with approved deviation) (E) and (H)

Louisiana Department of Natural Resources Injection and Mining Division, as required by State-wide Order 29B

Louisiana Department of Natural Resources Injection and Mining Division, as required by State-wide Order 29M

Louisiana Department of Natural Resources Injection and Mining Division, as required by State-wide Order 29B and 29M

Not to exceed 5 years, unless deviation has been granted

Deliverables (E = Electronic via Link to a Document
Management System, H = Hardcopy)

Due

- | | |
|---|---|
| (e) Class II Storage Well Weekly Monitoring Log (UIC-44) (H) | Due quarterly no later than 15 days from the end of the quarter |
| 19. Surveillance report identifying the drilling and seismic activities in the vicinity of each SPR site, excluding New Orleans (E) and (H) | Semiannually, by January 15 and July 15 |
| 20. Workover Performance Chart to the SSR and the SPRPMO (E) | 30 calendar days following completion of the workover |
| 21. Quarterly annuls pressure monitoring and improvement report | 30 calendar days following the end of the quarter |

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.L

PERFORMANCE AREA: Section B– Cavern Integrity and Workovers

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Cavern Remediation Workover Program – Ensure safe and successful execution of the FY 2018 cavern remediation workover program.	Utilizing the DOE rig or the Leased rig, and based on an approved priority-focused schedule, develop procedures for and safely execute remediation type workovers of caverns on the SPR.	1	2 A completed remediation of the wellbore will be deemed successful if the follow-up MIT passes.
2. Cavern Brine Diagnostic Workover Program – Ensure safe and successful execution of the FY 2018 workover program.	Utilizing the DOE rig or the Leased rig, and based on an approved priority-focused schedule, develop procedures for and safely execute diagnostic type workovers of caverns on the SPR.	10	7
3. Cellar Casing Maintenance Program – Ensure compliance with regulations requiring inspection of SPR well cellars.	Clean, inspect and repair (if necessary) SPR well cellars	Successfully execute 12 cellar projects	Successfully execute 15 cellar projects

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve


1. TITLE: Petroleum Acquisition and Transportation

2. WORK AUTHORIZATION NO.: 2019-1.X 3. REVISION: 0

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$6,487,424

6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization Directive

Petroleum Acquisition and Transportation

I. DESCRIPTION OF WORK

Perform all related tasks associated with the acquisition and transportation of petroleum from domestic, Federal, or foreign sources to the Strategic Petroleum Reserve (SPR). Includes overseas shipping, inland waterways, coastal shipping, pipelines, terminals, and tankage as well as all applicable taxes and tariffs.

Also, perform all related tasks associated with the drawdown, sale, and distribution of SPR petroleum. Includes overseas shipping, inland waterways, coastal shipping, and pipelines.

II. DELIVERABLES

To Be Determined.

III. PERFORMANCE MEASURES

None.

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve


1. TITLE: Power

2. WORK AUTHORIZATION NO.: 2019-1.G 3. REVISION: 0

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$1,909,594

6. DESIGNATED OFFICIAL: 
Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
Sally Leingang

9/28/18
Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization Directive

Power

I. DESCRIPTION OF WORK

Electrical power bills for the SPR are either paid by DOE or by the M&O Contractor. This WAD provides only the estimated costs necessary for payment of the M&O Contractor portion of electrical power billing.

The Contractor shall pay electrical power bills as authorized by DOE. The resources (i.e., labor, fringes, travel, etc.) required to pay bills are covered under the Operations, Cavern Integrity, and Workover WAD.

II. DELIVERABLES

See Operations, Cavern Integrity, and Workover WAD.

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.G
PERFORMANCE AREA: Power
FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Obtain most favorable energy tariffs considering operational options and existing contracts.	Annual site power costs are to be within the agreed power tariff agreements.	N/A	100 percent of the time

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

Fluor Federal Petroleum Operations, LLC

Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve

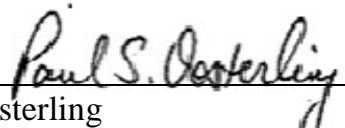
1. TITLE: Security Program

2. WORK AUTHORIZATION NO.: 2019-1.H 3. REVISION: 0

4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

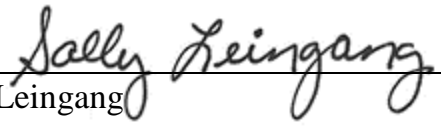
ESTIMATED COSTS: \$22,997,374

6. DESIGNATED OFFICIAL:



Paul S. Oosterling
Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER:



Sally Leingang

9/28/18

Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveSecurity ProgramI. DESCRIPTION OF WORK

The M&O Contractor manages the Department of Energy (DOE) Strategic Petroleum Reserve (SPR) Security Program, ensuring the protection of people, drawdown and crude oil flow operations, information, equipment, and resources, while sustaining a high state of readiness to respond to normal and emergency incidents. The following work synopsis are requirements in the Contractor Requirements Document (CRD), Federal and DOE regulations and laws for 2018.

- A. The Contractor must ensure protection force officers are fully trained, possess the proper security clearance, and are qualified to accomplish the DOE and SPR mission.
- B. The Contractor must manage an explosive detection program that promotes the SPR Protection Strategy defined in the SPR Site Security Plan. There are two elements to the program: explosive detection teams and explosive detection technology. An Explosive Detection Team is a fully trained and certified handler and canine. The program should address both the health and longevity of the canine, as well as filling canine vacancies. The program should also address effective explosive detection technologies employed at the SPR sites to complement the teams noted above.
- C. The Contractor must ensure the SPR has a strong access control program. This is accomplished by conducting local background checks, Personal Identification Verification (PIV), and security clearances in accordance with HSPD-12, REAL ID, and DOE Orders.
- D. Security technical support and protection operations must achieve and sustain “high operational security system effectiveness,” based on intelligence and a vulnerability/risk analysis approved by DOE.
- E. Physical Security Systems coupled with the Protection Force provides the foundation to execute the SPR Site Security Plan protection strategy. Physical Security Systems include: internal and perimeter lighting, barriers, clear zones, fencing, interior and exterior intrusion detection alarm and assessment systems, as well as tactical vehicles.

- F. The Contractor must immediately report and document all Incidents of Security Concern (IOSC) in accordance with DOE O 470.4B, Attachment 5 and the SPR IOSC Plan. Reporting includes any incident that affects the health and safety of all personnel. The IOSC must be categorized/classified within 24 hours of the incident.
- G. The Contractor must develop intelligence collection and sharing relationships with local, state, and federal intelligence agencies.
- H. In addition to accomplishing specifically assigned tasks, the Contractor performs SPR-wide protection functions which reflect sound business practices and which are an integral part of doing business with the government. The Contractor, in the performance of assigned responsibilities, must ensure compliance with current requirements, including annual review and revising implementation plans.
- I. The contractor must accurately execute DOE and SPR requirements for Unclassified Foreign Visits and Assignments.
- J. The contractor must complete and track milestones that ensures the Design Basis Threat Implementation Plan is completed before or on schedule.

II. DELIVERABLES

<u>Deliverables (E = Electronic via a Link to a Document Management System, H = Hardcopy, when requested)</u>	<u>Due</u>
1. Submit a report that captures the Security Protective Force Contractor Activity, to include staffing and attrition rates and overtime costs. (E)	10 th of each month
2. Submit one electronic document that captures the weekly Alarm Display and Annunciation System (ADAS) Summary of Outages and the work order number to repair the outage. This includes detection and assessment systems. The report must also report the number of outages repaired the previous week by work order number. (E)	Monday of each week
3. Weekly comprehension Situation Report (SITREP) for all sites	
4. Submit a daily SPR Security Alarm Status Feeder Report for each site	This includes the availability of Physical Security Systems for each site
5. Submit a: "Security Self-Assessment" Trend Analysis that captures findings and observations for the year for all sites	1 st week of November FY 2019
6. Status of all open Assessment Tracking System (ATS), Control Milestone Change Request (CMCR), and Department of Energy Action Tracking (DAT) action items. (E)	By the 5 th duty day each month
7. Submit FY 2018 Security Operations Plan (SOM) (E)	1 st Week in November 2017
8. Submit to the Director, SEOD, the Security Self-Assessment Rollup Report for all sites. (E)	November 15, 2017
9. Submit SPR 2018 Site Security Plan. (H)	February 23, 2019

<u>Deliverables (E = Electronic via a Link to a Document Management System, H = Hardcopy, when requested)</u>	<u>Due</u>
10. Submit after-action-report for Protective Force semiannual weapons qualifications. (E)	July 27, 2019
11. Submit Perimeter Intrusion Detection System Performance Testing for Bayou Choctaw, West Hackberry, Big Hill, and Bryan Mound results. This includes tracking and trending deficiencies and corrective action plan. (E)	July 27, 2019
12. Submit updated approved Security Operations Manual (SOM). (E) and (H)	July 20, 2018
13. Submit a security education and awareness training report of all employees completing the annual security briefing. (E)	February 15, 2019
14. All classified matter holdings will be reviewed annually for disposition, to include the destruction of at least 10% of the classified documents, and a report will be submitted to SEOD. (E)	July 27, 2019
15. Submit the Protection Force Physical Fitness Program Tracking and Trending Report. (E)	By the tenth of each quarter
16. Submit K-9 Certification Report. (E)	July 27, 2019
17. Submit Annual Training Plan. This will include the Training Needs Assessment. (E)	September 1, 2019
18. Submit Real ID Enforcement Tally (E)	First Thursday of each month for the previous month

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.H

PERFORMANCE AREA: Security Program

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	2019 OUTPUT	
		MINIMUM	TARGET
1. Conducted Self-Assessment of each site and include: The Elmwood facilities, Stennis, and all Warehouses containing SPR resources. Develop a schedule that insures all SF 470.8, Security Survey topical and sub-topical areas are covered over a 3-year period. Building 850 in the NOLA area must be assessed annually.	The self-assessment will be evaluated based on DOE Order 470.4B, Appendix "A", Section 2, paragraph 7. A schedule for covering all topical and sub-topical categories will be submitted to SEOD by November 15, 2017. All Findings will be recorded in the SPR Assessment Tracking System (ATS) and submitted with the Self-Assessment Report. The target is relative to the topics assessed. Findings are based on the ratings: Satisfactory, Marginal, or Unsatisfactory.	N/A	100 percent
2. Protect Classified Information:	No compromise of classical information. All Classified documents are reviewed annually for destruction by shredding. A report relative to the review of classified and submitted to SEOD by July 27, 2019.	a. N/A b. N/A	a. No Compromises b. No Deviations

WAD NUMBER: 2019-1.H
PERFORMANCE AREA: Security Program
FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	2019 OUTPUT	
		MINIMUM	TARGET
3. Physical Security Protection Systems will maintain in accordance with DOE and SPR requirements.	a. Detect an intrusion by an unauthorized person walking, crawling, jumping, running, and rolling.	a. Achieve a detection probability of 90 percent at a 95 percent confidence level	a. 100 percent detection
	b. Track and trend False and Nuisance Alarm Rate for Exterior Intrusion Detection Sensors (IDS).	b. Less than one alarm person sensor per day (24 hours of operations)	b. N/A
	c. Track and trend False and Nuisance Alarm Rate for Interior (IDS).	c. Less than one alarm per sensor per 2,400 hours of operation	c. N/A
	d. Ensure the clear zone meets requirements for detection and assessment.	d. Ensure the clear zone meet requirements for detection and assessment. The minimum is 20 feet.	d. As documented in Site Security Plan
	e. Repair and maintain availability of all physical security protection systems (inclusive of electronic, lighting, fences, interior and exterior IDS, alarm assessment, closed circuit television, tamper switches, tactical vehicles, etc.)	e. Non-drawdown critical resources: no more than 10 duty days (240 hours) outage per sensor	e. No more than 5 duty days (120 hours) outage per sensor

WAD NUMBER: 2019-1.H
PERFORMANCE AREA: Security Program
FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	2019 OUTPUT	
		MINIMUM	TARGET
4. Maintain 151 trained and qualified Protection Force Officers	Maintain the availability of 151 trained, qualified Protection Force Officers. Officers dedicated to working in the ADAS as SPOs may be included in the 151 total.	151	151
5. Maintain the ability to detect explosives, by effectively deploying technology and canine teams	Explosive Detection Canine teams must be certified annually. Explosive Detection technology must be accurate and available when canine teams are not available.	a. Certified Explosives Detection Canine teams available: 4 b. Explosives Detection Technology available: one for each site	a. Certified Explosives Detection Canine teams available: 10 b. Explosives Detection Technology available: one for each site with a spare

STRATEGIC PETROLEUM RESERVE PROJECT MANAGEMENT OFFICE
U.S. DEPARTMENT OF ENERGY

WORK AUTHORIZATION DIRECTIVE

TO

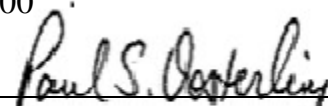
Fluor Federal Petroleum Operations, LLC


Management and Operating (M&O) Contractor for the
U.S. Department of Energy Strategic Petroleum Reserve

- 1. TITLE: Technical Support and Management
- 2. WORK AUTHORIZATION NO.: 2019-1.T 3. REVISION: 0
- 4. RESOURCE REQUIREMENTS: 5. PERFORMANCE PERIOD
FROM 10/01/18 TO 09/30/19

ESTIMATED COSTS: \$51,513,486

PROVISIONAL AWARD FEE: \$3,000,000

6. DESIGNATED OFFICIAL: 
 Paul S. Oosterling
 Acting Head of Contracting Activity

7. DOE CONTRACTING OFFICER: 
 Sally Leingang

9/28/18
 Issue Date

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - EngineeringI. DESCRIPTION OF WORK

Provide resources for engineering services in support of the Strategic Petroleum Reserve (SPR) mission, including: Design Engineering, Systems Engineering, Project Integration and Management Engineering, Maintenance Engineering, Chemical Engineering (for Vapor Pressure Mitigation) Operations/Logistics Engineering, Configuration Management, and Drafting Services.

Perform engineering and technical efforts so that SPR requirements are transformed into integrated operational systems and assure the systems are operated in accordance with the project requirements. This shall include totally integrated effort of engineering analysis, systems engineering, process engineering, test engineering, design engineering, logistics engineering, fire protection engineering, maintenance engineering (including predictive maintenance and failure analysis), and industrial engineering in an operating process and storage facility setting to assure operations and maintenance of SPR systems, equipment, and facilities meet technical, regulatory, and performance requirements in conjunction with schedule and cost objectives. All work shall be completed on or before approved milestone date(s) and in accordance with approved estimate(s). The engineering functions also include: systems engineering, configuration management, documentation control, drawing system control, drafting services, specifications and standards library, change control, cost estimating, technical writing, software programming, software system analysis, software laboratory, and the other normal administrative/technical services necessary for an integrated and efficient engineering effort. Engineering will incorporate life-cycle cost, Environmental, Safety and Health (ES&H), Security, Process Safety Management, Process Hazard Analysis (PHA), and reliability, availability, and maintainability (RAM) elements into engineering efforts, including designs and design reviews.

The M&O contractor shall support the Strategic Petroleum Reserve Project Management Office (SPRPMO) in the integration of **all** SPRPMO program activities, including but not limited to those identified and approved in the current version of the SPRPMO 0025 Ten Year Site Plan (TYSP). The M&O contractor shall support the SPRPMO in the identification and analysis of all work associated with TYSP capital projects, including the work of other organizations and prime contractors supporting the SPRPMO program in the accomplishment of associated milestones. The M&O contractor shall support the SPRPMO in the integration of **all** required activities, including but not limited to the following Government agencies, contractors, etc.: Sandia Laboratories and the Architect-Engineer (A-E). All contractual direction shall be through the DOE SPRPMO.

Perform system engineering/process engineering efforts in support of all SPR activities including: drawdown readiness, vapor pressure, and degassing efforts; security testing and startup; cavern storage development; oil fill, sales, and withdrawal; special studies and analyses; and the operation and maintenance of the sites, facilities, systems, and equipment. It shall provide systems performance analysis to assess the capability of process, systems, and equipment to meet performance requirements by reviewing and analyzing operational data, and analysis of any proposed systems changes. Engineering disciplines shall cover the areas required for problem resolution and associated analyses which will identify the most cost-effective and efficient solutions.

Completely review and analyze all operational occurrence reports, predictive maintenance results, corrective maintenance work order results, failure analyses, Hazard Abatement items, SPR tracking and trending data, and the Department of Energy (DOE) or Management and Operating (M&O) contractor boards of investigation for engineering and systems analysis concerns in a timely manner. Make recommendations for maintenance changes, operational changes, system changes, and/or engineering projects, as appropriate.

Provide sound and timely engineering advice on the operability and maintainability of all aspects of engineering design and construction management. Prepare and/or maintain System Description Manuals, Site Operations Manuals and Procedures, flow diagrams, and site operations and engineering models and databases. Identify potential impacts to SPR capabilities and make recommendations as to preventative and mitigating actions, including modifications to projects, systems, and/or procedures, as appropriate.

Support M&O Operations in maintaining updated plans for Systems Tests and Exercises (STEs) as required for crude oil drawdown, commissioning,

administrative oil sales, and operational demonstrations. Assist the sites in developing detailed operating procedures for the STEs. Assist M&O Operations in scheduling and conducting STEs in accordance with planning objectives and report on results, including recommendations for improvement. Maintain a current analysis of installed equipment to meet SPR drawdown requirements based on examination of previous drawdown demonstrations, site inventories, and RAM analysis, and identify problems. Based on these findings and those resulting from running site operations model exercises, provide timely recommendations to DOE for system changes in configuration, equipment, procedures, and/or logistics as required to (1) improve drawdown readiness, and (2) reduce downtime and the costs of operations and maintenance to ensure programmatic requirements are met.

Provide timely (1) guidance and technical expertise regarding the adequacy of current mission criteria and requirements, (2) support for DOE in developing business strategies designed to achieve drawdown recovery project objectives, and (3) assistance to DOE in identifying drawdown and distribution status, objectives, and philosophies. Provide technical guidance which reflects adherence and performance to Levels I, II, and III criteria and results in system/subsystem/component RAM.

Maintain a pipeline and piping assurance management plan for on-site and off-site piping and pipelines. Develop site specific action plans that support the strategies contained in the management plan. Provide timely reviews and analyses of inspections and audits of SPR pipelines to identify discrepancies/deficiencies requiring correction; make recommendations for the corrective action needed to address the identified discrepancies/deficiencies; provide instructions for the corrective maintenance of pipeline cathodic protection systems and plans for preventive maintenance of these same systems; review and provide analyses and make recommendations for the Pipeline Preventive Maintenance Program; and provide support during the procuring and installing of pipeline construction work. Provide comprehensive pipeline evaluations and recommendations for corrective actions to reflect (1) regulatory and permit requirements, (2) SPR operating history, and (3) compliance with codes and Level I, II, and III Criteria.

Develop life-cycle cost and cost benefit analyses to include trade off for potential changes to the SPR facilities and its operations.

Support SPR planning by maintaining a RAM Program that provides current identification of constraints and/or adverse trends of system operating data on the SPR's drawdown fill and security capability or system operations at each site. Based on the information provided by this program, provide recommendations to DOE for eliminating the constraints identified. Perform all reliability-related

functions, and meet the requirements of the “Reliability Program Provisions for SPR Contractors” and the SPR RAM Program. Perform and/or support failure analysis report efforts. Implement the provisions of the Comprehensive Equipment Evaluation (CEE) Program to ensure that the systems can meet their mission criteria.

The M&O Contractor shall operate and maintain a subsidence monitoring system in accordance with the approved Subsidence Management Program Plan. The plan consists of the planning of yearly subsidence surveys to be performed by a Professional Land Surveyor at each of the four SPR storage sites and quarterly surveys to be performed in the vicinity of Bryan Mound’s Cavern 3. All survey data will be reviewed for errors and then forwarded to Sandia National Laboratory for their analysis. The Program also consists of the installation and maintenance of GPS/Tiltmeter systems that have been installed at the Bayou Choctaw, Bryan Mound, and West Hackberry sites. The M&O Contractor is responsible for ensuring data is constantly being received from each of the instruments, stored, and is viewable by those authorized to view this information. The M&O Contractor is also responsible for maintaining an ongoing maintenance contract with the system design contractor and arranging for such contractor to perform quarterly maintenance visits to provide upgrade services and updates to the reference equipment.

Perform engineering designs in accordance with SPR requirements as defined in Level I Technical and Performance Criteria, Level II Performance Criteria, Level III Design Criteria, and the Control System Functional Specification to include: be the Engineer of Record (Responsible Engineer) as required. This effort shall be primarily devoted to a maintenance engineering-type effort in which design is performed on systems, equipment, and facilities to enable meeting SPR performance requirements, enhance system capability, improve reliability, or to accommodate changes in performance requirements. However, design engineering may include design efforts associated with Major Maintenance and Maintenance Construction projects. These design engineering efforts will generally be limited to engineering undertakings of less than 300 man-hours in duration. Design reviews shall be conducted for each design for which the M&O contractor functions as the Engineer of Record. Discrete new construction projects capable of being let by bid under formal advertising procedures will normally be designed by an A-E under separate contract to DOE. The M&O contractor shall provide Enterprise Change Proposals (ECPs) and Descriptions of Work (DOWs), including justification analysis, estimated costs for design and construction, for design projects performed by the A-E contractor(s). Also, when requested by the DOE, the M&O will provide conceptual design reports (CDRs) or definitive engineering scopes (DESS) for

design projects performed by another entity. The M&O contractor shall review A-E contractor designs at the various review stages and shall actively participate in the field and office reviews of these efforts. The M&O contractor shall include reviews for ES&H and security requirements as part of the design review process.

The M&O contractor shall maintain the Operational and training Software for the SPR and shall maintain the Operational Software Laboratory hardware in working order and provide software support as required when physical changes in instrumentation are made at the SPR sites. Update all documentation associated with software changes and control the software baseline in accordance with established configuration management procedures as required.

The M&O contractor shall be responsible for a comprehensive PHA to independently and systematically identify potential hazards and to quantify their probability and consequence. The scope of the PHA (in accordance with Code of Federal Regulations 1910.119 Process Hazards Analysis, Subsection E) shall include the safety analysis of design and construction of new facilities and/or major modifications to existing facilities whose identified hazards will ideally be mitigated through design or operational procedures. Details of the Contractor's System Safety Program Plan shall be approved by the DOE Contracting Officer.

The M&O contractor shall manage the Process Engineering System (PES) Database and use the database to plan and analyze operational activities. Ensure the data is transmitted safely and that the data is accurate and timely.

The M&O contractor shall support DOE efforts in commercialization of facilities, commercial oil storage, crude oil exchanges, as directed by DOE in design engineering, system engineering, configuration management, process engineering, project coordination and provide construction management services for projects assigned to M&O contractor.

The contractor shall perform the following activities:

A. Engineering

1. Perform Items 2-8 of Major Maintenance WAD 1.Z for maintenance construction projects, as applicable.
2. Perform Design Reviews.

3. Prepare Conceptual Design Reports, Definitive Engineering Scopes, and Descriptions of Work, as required.
4. Planning and estimating Construction Projects, as required.
5. Liaison with the A-E, Sandia National Laboratories, and other technical stakeholders.
6. Preparation/review of ECPs, Engineering Construction Changes (ECCs), Waivers, Deviations, and Change Notices (CNs).
7. Implementing corrective actions from on-site appraisals and internal audits.
8. Process, as required, red-lines and provide timely as-built configuration.
9. Site Engineering liaison as required.
10. Perform Engineering Design tasks.
11. Engineer of Record (Responsible Engineer), as required.
12. Manage Engineering support subcontracts required to augment activities such as paint analysis, survey tasks, chemical, site subsidence surveys, and geomechanical analyses, nondestructive testing, etc.
13. Prepare analyses, issue reports, and make recommendations on Maximum Allowable Operating Pressures, repairs, and upgrades based on the results from pipeline and piping assurance program.
14. Analysis of System Performance.
15. RAM engineering analysis and reporting.
16. Operational and Training Software Engineering.
17. Adhere to SPR Level I, II, and III Design Criteria.
18. Adhere to SPR ES&H and Security requirements.
19. Adhere to Maintenance of SPR Control System Functional Specification.

20. Support Startup and Acceptance Testing, Performance Testing, and Operational Demonstrations.
21. Perform and support Safety and Failure Analysis efforts (including PHA).
22. Perform Fire Protection Engineering support.
23. Prepare Site Mechanical and Electrical Operations Manuals and Procedures, as required.
24. Support Recovery Plan Implementation, as required.
25. Prepare and issue System Description Manuals Updates.
26. Perform engineering reviews.
27. Review data from the corrective maintenance program and analysis for RAM.
28. Analyze and enhance engineered Preventive Maintenance requirements, as required.
29. Analyze results from and develop enhancements for the Predictive Maintenance Program, as required.
30. Maintain PES Database and employ data for system performance, failure analysis, engineering issues to include supporting of drawdown and fill mission performance.
31. Ensure that discrete work packages assigned to the M&O contractor are scheduled and interim milestones are established.
32. Ensure that yearly site and quarterly Bryan Mound Cavern 3 surveys are planned, coordinated, and executed in accordance with the Subsidence Management Program Plan.
33. Ensure that the subsidence monitoring equipment (GPS, Tiltmeter, and Data Collection) are operating properly and ensure that a maintenance

contract is in place with the subsidence system design contractor and that quarterly visits are performed.

34. Review survey data and submit it to Sandia.

B. Configuration Management

1. Identify, control, and record changes (ECP, ECC, Deviation, Waiver, CN) to all systems hardware, software, and equipment.
2. Manage Technical Data Center and maintain SPR Technical Baseline original documents in electronic or digital form. These baselines include but are not limited to Level I, II, and III Criteria, Standard Specifications, Site Systems Description Manuals, technical baseline drawings, drafting manuals, Site Operations Manuals, Control System Functional Specification, and as-built configuration and vendor data.
3. Provide assistance for reproduction services, standards, manuals, serials, subscriptions, and publications, Federal rules decisions, environmental reports, construction estimating standards, Federal codes, and State-wide Orders.
4. The M&O contractor shall close out all ECPs within 90 days of the Readiness Review Board.

C. Planning and Scheduling

1. Develop and maintain SPR project baseline schedule, integrated where required, including, but not limited to, construction, major maintenance, security enhancement, vapor pressure, cavern integrity, SPR size modifications, and site schedules. Site schedules will place emphasis on maintaining SPR drawdown and fill readiness (consistent with Level 1 criteria).
2. Provide preparation and maintenance support for all SPR milestone actions, including CMCR preparation, milestone tracking and reporting, milestone closeout, and variance analysis.
3. Provide schedule interface and milestone maintenance, as required by DOE, for SPR-related schedules outside of O&M associated schedules (such as DOE milestones, A-E interfaces, etc.).

4. Develop and maintain resource-loaded schedules, as required by DOE, for the purpose of analyzing performance on a task or project.

D. Construction Management

1. Provide Construction Management services for operations and maintenance activities as required.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverable (E = Electronic via Link to a Document Management System)</u>	<u>Due</u>
1. Weekly Engineering Status Report (E)	Weekly (9 a.m. Monday)
2. RAM Assessment Report (E)	Quarterly (As Milestoned)
3. Update of SPR Blue Plate Presentation (Slide Show – (E), Video – (H))	January 31 & July 31
4. Annual Pipeline and Piping Integrity Report (E)	Annually by October 30 for Previous Fiscal Year
5. Brine Line Flow Integrity Test Results and Report (E)	As Required
6. Conceptual Design Reports, Descriptions of Work, and Definitive Engineering Scopes for review, comments, and concurrence (E)	As Milestoned
7. Failure Analyses (E)	As Required
8. Configuration Management documents for approval (ECPs, CNs, Deviations, Waivers, Closeouts, etc.) (E)	As Required

- | | |
|---|---------------|
| 9. Mechanical and Electrical Operations Procedures and Manuals Updates Notification (E) | As Required |
| 10. System Description Manuals Updates Notification (E) | As Required |
| 11. Corrective Maintenance Plans (E) | As Required |
| 12. PHA (E) | As Required |
| 13. Life Cycle Cost and/or Benefit Analyses (E) | As Required |
| 14. Cost Estimates, Cost Estimate Report, and History via Construction Cost Tracking Application (CCTA) (E) | As Required |
| 15. Systems Performance Analysis and Reports (STEs, Drawdowns, etc.) under separate cover (E) | As Required |
| 16. Vapor Pressure Analyses (E) | As Required |
| 17. PES Database Management Plan (E) | Every 5 years |
| 18. Detail Schedules (Cavern Integrity, Major Maintenance Projects assigned to M&O contractor, Vapor Pressure, RIK, etc.) (E) | As Required |
| 19. Maintenance Construction Deliverables per Major Maintenance WAD 1.Z (E) | As Required |

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management – Engineering

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
A. <u>ENGINEERING</u>			
1. Operations Manuals updates.	Percentage of Operations Manuals updated in SAP/SharePoint before new/revised systems turned over for operations.	95 percent	100 percent
2. Engineering support to Drawdown and Fill.	On-Line Readiness Computerized Assessment (ORCA) Checklist Responses.	ORCA items met with exceptions and acceptable workarounds	ORCA items met with no exceptions
3. Reliability, Availability, Maintainability (RAM) Provide assurance of the availability and reliability of system components necessary to carry out the SPR mission.	Calculated percentage of site availability to be validated by quarterly comprehensive equipment evaluation of critical equipment to support full rate drawdown.	≥ 95 percent for SPR-wide average each quarter calculated	≥ 95 percent for each site each quarter

WAD NUMBER: 2019-1.T
 PERFORMANCE AREA: Technical Support and Management - Engineering
 FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>B. CONFIGURATION MANAGEMENT</p> <p>1. Manage Technical Data Center (TDC) and maintain SPR Technical Baseline original documents (red-lines, as-built, vendor data, etc.) to include electronic media.</p>	<p>a. Percentage of Enterprise Change Proposals (ECPs) closed within a 90-day (calendar) period from the Final Readiness Review Board Acceptance date.</p> <p>b. Priority 1 as-built completed within 30 days after receipt by the New Orleans TDC.</p>	<p>a. 75 percent</p> <p>b. 90 percent</p>	<p>a. 100 percent</p> <p>b. 100 percent</p>
<p>2. Development and processing of Configuration Management documents (ECPs, Deviations, Waivers, Engineering Construction Changes (ECCs), Advance Change Notice (ACN), etc.) in accordance with SPRPMO Order410.</p>	<p>Percentage of Configuration Management documents processed in compliance with SPRPMO Order 410.</p>	<p>90 percent</p>	<p>100 percent</p>
<p>3. ECPs processed as ratifications</p>	<p>Number of ratifications processed resultant from work not previously authorized and not classified as emergency work.</p>	<p>1</p>	<p>0</p>

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization Directive

Technical Support and Management - Quality Assurance

I. DESCRIPTION OF WORK

The Contractor will assign and identify a senior management position who shall have the responsibility, authority, and accountability to ensure the development, implementation, assessment, maintenance, and improvement of their Quality Assurance Program (QAP).

The Contractor shall establish and maintain a comprehensive QAP (also could be referred to as a Quality Management System (QMS)). The scope of this program will include the activity of all Contractor employees and shall not be limited solely to the duties of a Contractor's Quality Assurance Office. The Contractor's QAP shall implement the management, performance, and assessment criteria as defined in SPRPMO O 414.1D, "Quality Assurance Program." Such criteria will include the management program, personnel training and qualifications, quality improvement, documents/records, work processes, design, procurement, inspection and acceptance testing, management assessments, and independent assessments. The Contractor's QAP shall also be developed using the International Standards Organization (ISO) 9001 industry-wide consensus standard. Additional QA guidance to be utilized in the development of the Contractor's QAP include DOE G 414.1-2B Admin Chg. 2, "Quality Assurance Program Guide," and DOE G 414.1-1C, "Management and Independent Assessments Guide." The Contractor will ensure management assessments, independent assessments, and self-assessments are scheduled for the fiscal year, and that such assessments are performed. All findings (as defined by SPRPMO O 226.1C, "SPRPMO Oversight Program") will be tracked in Assessment Tracking System (ATS).

The Contractor shall establish, document, and implement a Suspect/Counterfeit Item (S/CI) prevention program, as a part of the Contractor's QAP and as mandated by DOE O 414.1D Admin Chg. 1 "Quality Assurance." The S/CI program must have effective controls and processes that will ensure items and services for the SPRPMO meet specified requirements; prevent entry of S/CI into the SPR's supply chain; and ensure detection, control, reporting, and disposition of S/CI's. The QAP

shall also utilize the guidelines listed in DOE G 414.1-2B Admin Chg. 2, Section 5.0. Nonconforming items that do not meet the definition of S/CI (per DOE O 414.D Admin Chg. 1) must be controlled by site procedures for nonconforming items. The S/CI prevention program must include S/CI oversight commensurate with the facility/activity hazards and mission impact. It must identify the position responsible for S/CI activities and for serving as point of contact with Office of Health, Safety, and Security, and it must provide for training and informing managers, supervisors, and workers on S/CI processes and controls.

The Contractor will establish and maintain a comprehensive and integrated Contractor Assurance System (CAS) program in accordance with QA requirements mentioned above and will address the criteria described in DOE O 226.1B, "Implementation of DOE Oversight Policy" and SPRPMO O 226.1C, "Strategic Petroleum Reserve Project Management Office Oversight Program." The CAS program will address the following aspects of operations Environmental Management System, Safety and Health, Security/Safeguards, Fire Protection/Emergency Management, Quality Assurance Program, Cyber Security and Information Technology Services/Data Systems, Engineering and Construction, Project Management, Cavern Integrity, Operations and Maintenance, Financial Systems, Personnel/Human Resources/Human Capital, Property, Procurement, Internal Audit, and Life Extension 2. The Contractor will perform a validation on the effectiveness of their CAS program.

The Contractor's QAP, in conjunction with their CAS program, will ensure the timeliness of corrective action implementation and the effectiveness of corrective actions. Corrective actions will be made on the basis of a well disciplined and thoroughly documented casual analysis. These programs will ensure the effectiveness of assessments and self-identification of non-compliances.

The CAS must include development of an issues management program capable of categorizing the significance of findings based on risk and priority and other appropriate factors that enables Contractor management to ensure that problems are evaluated and corrected on a timely basis. For issues categorized as findings, Contractor management must ensure activities identified by SPRPMO O 226.1C, Attachment 1, Section 1.e.(3) are completed and documented.

The Contractor will ensure the development of an issues management program which includes a trending and analysis based on validated information of all findings/discrepancies/observations for areas of improvement, lessons learned, as well as an opportunity to eliminate potential system weaknesses.

The Contractor will pursue, acquire, and maintain International Standards Organization (ISO) 9001:2015 (or latest revision) certification. The Contractor will use a registrar that has been certified by the Registrar Accreditation Board. The Contractor will maintain this certification for as long as the contract is in effect.

The Contractor will maintain an SPRPMO Lessons Learned (LL) database. The database will meet the requirements of DOE O 210.2A, "DOE Corporate Operating Experience Program," and SPRPMO O 210.3, "Lessons Learned Program."

The Contractor will be responsible for flowing down all DOE requirements to subcontractors.

II. DELIVERABLES

Dates are indicated where feasible. However, should one of the below dates become inconsistent with an official milestone, the milestone shall govern. Documentation submitted for deliverables identified below will be evaluated against the criteria, review, and approach documents (CRADs) developed by the Office of Health, Safety and Security, where applicable.

Deliverables include the following:

Deliverable (E = Electronic via Link to a Document Due
Management System, H = Hardcopy)

Management Program:

- | | |
|---|------------------|
| 1. Letter Identifying Senior Manager Responsible of QAP for review/approval and Letter identifying position responsible for S/CI activities and for serving as point of contact for Office of Health, Safety, and Security (annual) (E) | October 12, 2018 |
| 2. Review QAP and submit summary of annual review, including all QA procedures and work instructions referenced in the QAP (e.g., OA Procedures, PI Procedure, QMS Procedure, and S/CI Procedure,) (annual) (E) | January 11, 2019 |

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

- | | |
|--|--|
| 3. Master Assessment Schedule (identify management assessments, self-assessments, and all oversight activities) (quarterly) (E)
Report on oversight activities at each Project Review | October 31, 2018 (for 4 th Qtr of Previous Year)
January 31, 2019 (1 st Qtr)
April 27, 2019 (2 nd Qtr)
July 31, 2019 (3 rd Qtr) |
| 4. Calculate and submit CAEI (quarterly) (E) | October 31, 2018 (for 4 th Qtr of Previous Year)
January 31, 2019 (1 st Qtr)
April 27, 2019 (2 nd Qtr)
July 31, 2019 (3 rd Qtr) |
| 5. Calculate and submit AEI (quarterly) (E) | October 31, 2018 (for 4 th Qtr of Previous Year)
January 31, 2019 (1 st Qtr)
April 27, 2019 (2 nd Qtr)
July 31, 2019 (3 rd Qtr) |

Quality Improvement:

- | | |
|---|--|
| 6. Quality Improvement Program Status (quarterly) (E) | October 12, 2018 (for 4 th Qtr of Previous Year)
January 12, 2019 (1 st Qtr)
April 12, 2019 (2 nd Qtr)
July 12, 2019 (3 rd Qtr) |
| 7. Provide an electronic report of Lessons Learned Program activity (quarterly) (E) | October 12, 2018 (for 4 th Qtr of Previous Year)
January 12, 2019 (1 st Qtr)
April 12, 2019 (2 nd Qtr)
July 12, 2019 (3 rd Qtr) |
| 8. Provide a status report for open non-conformances that are in excess of 44 days overdue (from the action due date). Status of each report line item should include a commentary which explains the overdue status. (quarterly) (E)
Report on CAP status at each Project Review. | October 31, 2018 (for 4 th Qtr of Previous Year)
January 31, 2019 (1 st Qtr)
April 27, 2019 (2 nd Qtr)
July 31, 2019 (3 rd Qtr) |

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

9. Submit Semiannual CAS Report to include the following sections:

October 12, 2018

April 12, 2019

- Training / Qualifications:

QA Evaluation and Trending Report of the Contractor's Personnel Training and Qualifications Program (semiannual) (E)

- Documents & Records:

QA Evaluation and Trending Report of Contractor's Documents & Records System (semiannual) (E)

- Work Processes:

QA Evaluation and Trending Report of the Contractor's RAM Program (semiannual) (E)

QA Evaluation and Trending Report of the Contractor's Conduct of Operations (semiannual) (E)

QA Evaluation and Trending Report of the Contractor's Drawdown Program (semiannual) (E)

QA Evaluation and Trending Report of the Contractor's Crude Oil Quality Program (semiannual) (E)

QA Evaluation and Trending Report of the Contractor's Maintenance Management Program (semiannual) (E)

QA Surveillance and Inspection of Site/Supplier Activities (monthly) (E)

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

- Design:
QA Review of Design Documents (including design reviews and ECPs) (semiannual) (E)
- Procurement:
QA Evaluation and Trending Report of M&O contractor's Procurement Program (including SMTR responsibilities) (semiannual) (E)
- Inspection & Testing:
QA Evaluation and Trending of M&O's Inspection and Acceptance Testing Program (semiannual) (E)

Management/Self-Assessments:

- | | |
|--|--|
| 10. Management Assessment Plan which includes all areas to be assessed (E) | October 12, 2018 |
| 11. Conduct Management Assessments and submit assessment report for each organization (E) | Within 45 calendar days after beginning of each assessment |
| 12. OA Assessment Plan for each site assessed (E) | No later than 14 calendar days prior to assessment |
| 13. Conduct OA for each site and complete final OA Appraisal Site Report and Trending Analysis (E) | OA per OA schedule, and report within 30 calendar days after completion of each assessment |
| 14. Summary OA/Management Assessment Program Report and Trending Analysis (annual) (E) | October 12, 2018 |

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

Independent Assessments:

- | | |
|---|--|
| 15. Submit FY 2019 ISO 9001 Assessment Schedule (E) | Within 3 working days of finalizing the schedules with the ISO Registrar |
| 16. Submit FY 2019 ISO 9001 Assessment Plans (E) | Within 3 working days of receiving assessment plan(s) from ISO Registrar |
| 17. Submit ISO 9001 Registrar Report (E) | Within 3 working days of receiving report from ISO Registrar |
| 18. Submit corrective action plans for ISO 9001 fiscal year audits (including ATS Number) (E) | Within 3 working days of submitting corrective action plan as identified in ISO Registrar's Report |
| 19. Submit closure for ISO 9001 corrective action plans for fiscal year audits (including ATS Number) (E) | Within 3 working days of closing corrective action plan |

Suspect/Counterfeit Items (S/CI):

- | | |
|--|--|
| 20. S/CI Program Status Report (quarterly) (E) | October 12, 2018 (for 4 th Qtr of Previous Year)
January 12, 2019 (1 st Qtr)
April 12, 2019 (2 nd Qtr)
July 12, 2019 (3 rd Qtr) |
|--|--|

Contractor Assurance System (CAS):

- | | |
|--|------------------|
| 21. CAS Program Description Documents for review/approval (annual) (E) | October 12, 2018 |
|--|------------------|

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
22. Develop Assessment Plan and conduct Assurance Activities for CAS Program (E)	Plan within 14 calendar days prior to assessment, and complete assurance activities within 30 calendar days following the end of each quarter
23. CAS Management Summary Report (annual) (E)	October 12, 2018
24. Submit an Oversight Report (quarterly). (E) Results to be presented at each Project Review	October 12, 2018 (for 4 th Qtr of Previous Year) January 12, 2019 (1 st Qtr) April 12, 2019 (2 nd Qtr) July 12, 2019 (3 rd Qtr)
25. Perform and submit a company-wide issues management trending analysis of findings/ discrepancies/observations (quarterly). (E) Present results at each Project Review. Trending should focus on analysis of findings to identify potential systemic issues, areas of concern/opportunities for improvement utilizing an organized management framework as the basis for analysis (e.g. Conduct of Operations, ISM, etc.).	October 31, 2018 (for 4 th Qtr of Previous Year) January 31, 2019 (1 st Qtr) April 27, 2019 (2 nd Qtr) July 31, 2019 (3 rd Qtr)

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management – Quality Assurance

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. ISO 9001 (latest revision) – Certification.	Obtain and maintain certification.	September 28, 2019	September 14, 2019
2. Corrective Action Effectiveness Index (CAEI) CAEI measures the timeliness of corrective action implementation and effectiveness of corrective action in preventing recurrences of issues and events.	$CAEI = (200,000 \times \sum [(Item_1 \times WF_1) + (Item_2 \times WF_2) + \dots + (Item_n \times WF_n)]) / \text{Monthly Hours Worked}$ 200,000 hour constant Monthly Hours Worked = Total contractor work hours for the accounting month Item = the number of times the item occurs within a month WF = weighted factor based on item category, as defined in Table 1.0 below See Table 1.0	The allowable three monthly rolling average for the CAEI must not exceed 30.	The allowable three monthly rolling average for the CAEI must not exceed 20.

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management – Quality Assurance

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>3. Assessment Effectiveness Index (AEI)</p> <p>AEI measures the effectiveness of assessments and self-identification of non-compliances. The index includes completion of scheduled assessments (i.e. management assessments, independent assessments & self-assessments) on the master assessment schedule, and self-identifying non-compliances prior to identification by an external party (i.e. ISO, OSHA, M&O contractor QA, M&O contractor Internal Auditing Office, 3rd Party Auditors, and DOE).</p>	<p>$AEI = (\sum [(Performance\ Item1 \times WF1) + (Performance\ Item2 \times WF2) + \dots + (Performance\ Itemn \times WFn)]) / 100$</p> <p>100 hour constant</p> <p>Performance Item = the number of times the item occurred within a month</p> <p>WF = weighted factor based on associated performance item</p> <p>See Table 2.0</p>	<p>The allowable three monthly rolling average for the AEI must not exceed 1.5.</p>	<p>The allowable three monthly rolling average for the AEI must not exceed .75.</p>

Table 1.0 Corrective Action Effectiveness Index Categories & Weighted Factors

ITEM CATEGORY	WEIGHTED FACTOR (WF)
Occurrence Report Category “R” – recurring occurrences	10
Office of Health, Safety & Security repetitive noncompliance	10
DOE identified repetitive noncompliance	10
Contractor identified repetitive noncompliance	10
Ineffective corrective action	5
Noncompliance corrective action not completed as scheduled	3
Noncompliance corrective action schedule extended	2

Table 2.0 Assessment Effectiveness Index Categories & Weighted Factors

PERFORMANCE ITEM	WEIGHTED FACTOR (WF)
Scheduled Management Assessment not completed	5
Scheduled Independent Assessment not completed	5
Scheduled Self Assessment not completed	5
Noncompliance identified by external party	10

Corrective Action Effectiveness Index Item Category Definitions

- **Occurrence Report Category “R” – recurring occurrences** – as defined in DOE O 232.2 Admin Chg. 1, Attachment 2, Section 1.g.: Significance Category “R” - recurring occurrences are those identified as recurring, either directly or through periodic analysis of occurrence and other non-reportable events.
- **Office of Health, Safety & Security repetitive noncompliance** – Two or more different events or conditions that involve substantially similar work activities, locations, equipment, or individuals where it would be reasonable to assume that the contractor’s corrective actions for the first occurrence should have prevented the subsequent event/condition. Repetitive noncompliances involve similar circumstances or root causes, separated by a period of time, that suggest the possibility of a common solution. Definition per DOE Safety and Security Enforcement Coordinator Handbook dated August 2012.
- **DOE-identified repetitive noncompliance** – same definition as above (per DOE Safety and Security Enforcement Coordinator Handbook dated August 2012).
- **Contractor-identified repetitive noncompliance** – A validation/verification of an implemented corrective action plan from a previously identified nonconformance that shows evidence of still being noncompliant to the requirement or a persistently occurring discrepancy. If the corrective action plan was implemented as written and is still noncompliant then the actual cause of the problem was not identified. Thus the corrective actions put in place were not effective. If the corrective action plan was not implemented as planned or was ignored/no action taken then that is a repetitive noncompliance. A repeat finding or repetitive noncompliance is one that has been previously identified at a site and closed in the Assessment Tracking System as corrected, but which is found to still be noncompliant during a future assessment or audit.
- **Ineffective corrective action** – Corrective actions (including corrective actions for incidents with significant negative impacts to the worker, the public, or the environment), under the purview of the Contractor, which once completed and implemented fails to mitigate the identified non-conformance (as evidenced by multiple similar noncompliances that in aggregate indicate a significant programmatic breakdown. Corrective actions that fail to globally implement solutions across the organization may be considered ineffective if they do not resolve similar occurrences of the identified non-conformance throughout the organization.
- **Noncompliance corrective action not completed as scheduled** – Corrective actions, under the purview of the Contractor (including corrective actions for incidents with significant negative impacts to the worker, the public, or the environment) that is not completed on or before its Scheduled Completion Date as defined in the Assessment Tracking System.

- **Noncompliance corrective action schedule extended** – Corrective actions, under the purview of the Contractor (including corrective actions for incidents with significant negative impacts to the worker, the public, or the environment) which is extended past its original Scheduled Completion Date.

Assessment Effectiveness Index Performance Item Definitions

- **Scheduled Management Assessment not completed** – Management Assessments are defined by DOE G 414.1-1C Section 3.5.1 as a periodic introspective self-analysis, conducted by management, to evaluate management systems, processes, and programs to ensure the organization’s work is properly focused on achieving desired results. Any Management Assessment not completed (including a completed report) as required by the approved schedule during a given calendar year will be considered not completed for the purposes of this measure.
- **Scheduled Independent Assessment not completed** – Independent Assessments are defined by DOE G 414.1-1C Section 3.5.2 as an assessment conducted by individuals within the organization or company but independent from the work or process being evaluated, or by individuals from an external organization or company. Any Independent Assessment not completed (including a completed report) as required by the approved schedule during a fiscal year will be considered not completed for the purposes of this measure.
- **Scheduled Self-Assessment not completed** – Self-Assessments are performed by personnel within a process or entity or with direct responsibility for a process or entity that are designed to gauge effectiveness, operability, compliance, or status. Any failure to complete Self-Assessments as scheduled on an approved schedule and documenting results as prescribed for any self-assessment program will be considered a noncompleted assessment.
- **Noncompliance identified by external party** – Any noncompliance identified by an external assessor or organization (that is any organization external to the contractor being assessed). Noncompliance is defined as any inadequacy that is found during an assessment that does not meet the intent of a contractor’s documented procedure, DOE requirement (policy, order, manual, guide, etc.), federal or state law, or other applicable requirement (e.g., contract, standard). External assessments include but are not limited to ISO 9001, ISO 14001, OSHA VPP, Accident Investigations (Judgment of Needs), OIO Investigations, GAO Investigations, IG Investigations, HSS Investigations, DOE Onsite Management Appraisals, DOE Security Surveys, DOE Technical Assurance Surveillance Reports (TASRs), DOE Observation Reports, and DOE Technical Assessments.
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M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Procurement/ContractsI. DESCRIPTION OF WORK

The Contractor shall develop and maintain a general purchasing activity for the purpose of entering into subcontracts for the performance of work required to support the SPR. The Contractor shall acquire equipment, services, supplies, and publications, not otherwise listed as Government-furnished, to perform the functions covered by the contract. These acquisitions and services shall also support DOE and other SPR contractors as directed by the Contracting Officer. The Contractor shall subcontract for construction requirements to support maintenance and operations, including the approved construction program.

As applicable, the Contractor shall adhere to the requirements of Federal and DOE acquisition regulations, directives/policies, as well as DOE-approved company procedures and policies. The Contractor shall develop and maintain procurement policies and procedures, approved by the Contracting Officer, necessary to implement effective and efficient commercial practices. The Contractor shall maintain an approved Balanced Score Card Program in order for the Contracting Officer to assess the adequacy of the Contractor's purchasing system.

The Contractor shall perform effective management, administration and oversight of all issues related to Contract No. DE-FE0011020 as required to ensure the timely dissemination of all performance direction received from the Contracting Officer to all M&O contractor organizations as well as a thorough review of such direction to ensure that all actions are implemented in accordance with the contractual requirements and the prime contract Work Authorization Directives. The Contract Management function shall also be responsible for management and negotiation of the M&O contractor award fee pool, and management of the Contractors Membership, Registration, and License Budget.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Socioeconomic Subcontracting Goals (E)	Annually (September 1)
2. Socioeconomic Subcontracting Achievements vs. Targets (E)	Monthly (10 th of month)
3. Subcontracting Report for Individual Contracts (E)	Semiannually (October 30 and April 30)
4. Summary Subcontract Report (E)	Annually (October 30)
5. FY 2018 Balanced Score Card Final Report, including the FY 2019 Balanced Score Card Self-Assessment Plan (E)	Annually (October 30)
6. Davis-Bacon Report (E)	Semiannually (October 5 and April 5)
7. Strategic Sourcing Cost Savings Report (E)	Quarterly (October 15, January 15, April 15, July 15)
8. Strategic Sourcing Plan to include FY 2020 Procurement Spend (Actionable) (\$); FY 2019 Actual Procurement Spend (Actionable) to date (October 1, 2018 to July 31, 2019) (\$); and FY 2019 Projected Procurement Spend (Actionable) to the end of the FY (\$) (E)	August 20

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
9. M&O Subcontract Reporting Capability (MOSRC) for FY 2019 Transactions (E)	Monthly (20 th of the month for prior month's transactions)
10. FFATA Sub Award Reporting System (FSRS) – List of subcontract awards to be uploaded to FSRS (E)	Monthly (15 th of the month)

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Procurement/Contracts

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. To deliver to the contractor’s customers on a timely basis those best value products and services necessary to accomplish the purposes of the Government’s contract, utilizing the contractor’s experience, expertise, and initiative consistent with Department of Energy Acquisition Regulation Subpart 970.	Achievements relative to Procurement Balanced Score Card performance targets.	Meet or exceed 70 percent of all performance targets	Meet or exceed 85 percent of all performance targets

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Project ManagementI. DESCRIPTION OF WORK

Contractor ensures that all technical and administrative program functions are planned, controlled, directed, analyzed, documented, presented, and reported in a disciplined, cost-effective, timely manner.

A. Management of Contract Activities

Administrative and technical programs are conducted in a manner that will:

1. Maintain the SPR's drawdown readiness procedures.
2. Eliminate unnecessary risks.
3. Create a work environment that will ensure effective uninterrupted facilities operations.
4. Actively review, identify, and communicate to DOE management activities that could impact current or future operations of the SPR.
5. Establish and maintain DOE and public confidence in the management of the SPR.
6. Improve the economy, efficiency, and effectiveness of contract performance.

Place specific emphasis on maintaining SPR drawdown readiness (consistent with Level 1 criteria) and compliance with all relevant Environmental, Safety and Health and Equal Employment Opportunity statutes and regulations.

The Contractor shall prepare and submit the performance self-assessments as outlined in the list of deliverables.

B. Project Planning and Control

1. Develop, implement, and maintain a management control system in accordance with DOE guidelines and SPR-related Orders and directives (DOE Order 413.1B, Internal Control Program).
2. Assure that the electronic management of Project/Program Review action items is maintained in a current status and the data report is completely accessible to DOE.
3. Ensure that all work assigned by WADs under the contract are properly assigned within the Contractor's organization structure and contract work breakdown structure.
4. Ensure that all work assigned by WADs is planned, in accordance with the appropriate Departmental, Federal, State, and local regulations.
5. Ensure that work package budgets are formulated using established estimating techniques. When reasonable and cost effective, work packages should include all costs by cost elements.
6. Develop and maintain the Annual Operating Plan in accordance with DOE/SPR guidance and specifically in accordance with SPRPMO O 130.1C, M&O Contractor's Annual Operating Plan Formulation and Execution. The Annual Operating Plan will include both obligation and cost plans.
7. Support Annual Operating Plan (Obligation and Cost) performance analysis, documentation, and reporting in the Cost Management Report and Project Reviews, and special meetings in accordance with DOE guidance.
8. Maintain an updated SPRPMO M&O Work Breakdown Structure for all applicable projects.
9. Maintain an updated SPRPMO M&O Project System Description.

C. Legal Services

1. Provide legal advice and assistance in support of contractor functions and to DOE as directed by the Contracting Officer.
2. Support preparation of documents.
3. Assist in defending claims and suits, involving DOE when requested.
4. Provide legal support to pursue and defend against claims and suits, including warranty actions, consistent with contractual requirements and your approved litigation management procedures, including submission of outside counsel billings for DOE approval.

D. Communications and Public Affairs

1. Manage an effective communications and public affairs function in support of drawdown readiness and emergency operations, including participation in all exercises and reviews and execution of requisite training for pertinent individuals.
2. Perform duties in connection with media and public contacts and inquiries. This includes support in preparing for interviews, issuing press releases, maintaining current footage, updating presentation material, coverage at public hearings, community activities, and participating in communications programs, as requested by DOE.
3. Plan and administer an effective community outreach program consistent with contract provisions.
4. Maintain a current media library comprised of material to be used for exhibits and presentations. Provide support in arranging exhibits and designing presentations.
5. Provide support for the yearly Louisiana Regional Science Bowl.

E. Miscellaneous Services

1. Provide support for all activities and initiatives required for conducting the operations of the SPR involving programmatic capability, capacity, mission or initiatives changes, and associated responsibilities such as investigations and assessments.
2. Provide Printing Management in accordance with the Government Printing and Binding Regulations.
3. Provide Graphics and Photography Services in accordance with customer requests and requirements.
4. Manage an effective risk management and liability program as required by law or regulation and in compliance with contract requirements.

F. Site Support

Provide technical, management, and administrative support for site functions covering all disciplines.

G. Site Management

Includes overall management to accomplish the mission of oil storage, drawdown, and continued site readiness. Provide for the overview, monitoring, and coordination of site activities with New Orleans directives, instructions, and policies, and interfaces with DOE site counterpart.

H. Records Management

M&O Contractor shall provide a Records Management Program in accordance with prescribed contractor requirement documents for records management. Manage Federal Records created or received by M&O Contractor according to NARA-approved schedules and practices. Maintain a Records Inventory and Disposition Schedule (RIDS) and provide records (electronic and/or paper based), including email records management capabilities and a vital records program.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Quarterly Project Review Material and Presentation (E) and (H)	To Be Determined
2. Planned Cost versus Actual Cost Variance Explanation (Legal) Report (H)	Within 14 calendar days of the quarter being reported
3. Annual Diversity Plan (E) and (H)	August 31
4. Update of SPR Blue Plate Presentation (Slide Show – (E), Video – (H))	January 31 and July 31 (Twice Annually)
5. Biennial Review of SPR Video (E)	August 31 (Every Other Year)
6. Proposed Insurance Program (E)	Annually (45 days after implementation if corporate sponsored or 5 days prior to implementation if third-party sponsored)
7. Plan Experience Reporting, Clause H.42 (E)	Annually (Within 90 days of the close of policy year)
8. Report of General Liability Claims/ Settlements and Outstanding Consulting Agreements(E)	On Occurrence and Quarterly (Within 30 days of the close of the quarter)
9. Quarterly Self-Assessments (E), as applicable	5 workdays after end of each evaluation period
10. Printing and Publishing Three-Year Site Plan (E)	Annually (due by date established by DOE)

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

- | | |
|---|--|
| 11. Commercial Printing Plan(E) | Annually (due by date established by DOE Acquisition and Sales Director) |
| 12. M&O Record Inventory & Disposition Schedule (E) | Annually, by September 30 |
| 13. Assessment of M&O Records Management Program (E) | Quarterly (Within 30 days of the close of the quarter) |
| 14. Update and recertify SPR's Records Management Compliance Plan (E) | Annually, September 30 |

III. PERFORMANCE MEASURES

None.

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Information TechnologyI. DESCRIPTION OF WORK

Manage, operate, and maintain computer services to latest versions within one year of version release (unless there are known compatibility issues with other major SPR applications and thus relieved of this requirement by DOE), telecommunication services, office automation, software engineering, and information systems (e.g., Enterprise Resource Planning, SPR Mission-Related Applications such as Sales Offer Evaluation Program (SOEP) and Crude Oil Sales Offer Program (COSOP), Crude Oil Valuation and Tracking System (COVATS), Document Management, Collaboration (SharePoint and K2), E-mail, Extranet Infrastructure, etc.) required to support the mission and goals of the SPR. The information technology and communications functions shall be performed in compliance with the current approved Technical Baseline infrastructure and pertinent DOE Orders and SPR Orders and procedures, the Federal Information Resources Management Regulations, and DOE Chief Information Officer Information Architecture Standards as adopted by SPR.

The M&O contractor shall:

- A. Operate and maintain the business application and database servers, peripheral hardware, and associated software. Conduct appropriate and timely maintenance of in-house developed applications as required to address user requirements, fix vulnerabilities, and upgrade/patch underlying infrastructure. Manage and backup information to ensure data integrity and availability; conduct performance analyses, capacity planning, and configuration management tasks to ensure adequate, current resources; provide consultation services; maintain current operating systems software with migration to latest releases as soon as practical; and maintain a list of physical inventory items that are procured and/or turned over to the M&O contractor to manage. Migrate to more automated systems of Information Technology-oriented configuration management (CM) for software, hardware, and cyber security, and continue the Information Technology Project Portfolio effort. Propose, plan for, and implement a password

management solution for SPR users as budget allows and contingent upon approval by the SPR Authorizing Official. On an annual basis, identify other areas for innovation that will provide for improved user experience by increasing end user capabilities (self-service or otherwise), and by addressing known end user pain points.

- B. Operate and maintain the Network Infrastructure consisting of wide-area network file/print servers, virtualized server farm, Internet, and fax servers, and related routers, switches, and other communications equipment. Evaluate using cloud services to replace/augment network application servers and services. Additionally, determine if the footprint of the SPR Alternate Data Center can be reduced by offloading servers to the cloud. Manage and control user identities for information systems, as well as maintain the implementation of Homeland Security Presidential Directive-12 (HSPD-12) Logical Access at the domain level of PIV logon to include local, remote, and privileged user access, or other multifactor authentication (MFA) capabilities as applicable. Plan for and execute continued Logical Access deployment per the DOE Logical Access Control System (LACS) Implementation Plan milestones and as directed by DOE senior management. Infrastructure support will include at a minimum operation and maintenance of local and site Voice Over IP (VOIP) telephone systems, cellular services with integrated mobile computing, video conferencing, video bridge, and data communications facilities to include install, move, add, and change tasks for all sites; issue service orders and coordinate Federal Telecommunications System (NETWORX), and leased-line service; coordinate trouble reports; monitor network facilities to assure availability, operating efficiency, incorporating the use of SCOM for server to application monitoring, and adequate bandwidth capacity to the sites; minimize unplanned network downtime; perform routine analysis to minimize misuse of telephone resources; and maintain associated equipment inventory and circuit inventory.
- C. Provide Personal Computer (PC), Tablets, Smart Phones, Thin Client Appliances, and Local-Area Network (LAN) and Wide Area Network (WAN) support by responding to requests for acquisition, developing requirements, installation of PCs and networks, including performance tuning of networks. Provide Help Desk service and fully support standard SPR PC software suite. Provide LAN administration and network management for all SPR networks; provide preventive and corrective maintenance for all PCs and LANs; make required upgrades and maintain a complete library along with an appropriate level of configuration control on all SPR Data Systems

infrastructure. Maintain and continue to develop the capacity for secure telecommuting at the SPR. Provide adequate assurance that approved Information Technology requests for new IT Projects (which may include Automated Data Processing (ADP) Hardware, ADP Software, or services) are processed as necessary to support the SPR mission. Assure timely delivery of initial project schedules for all IT Requests that will have a duration greater than 60 days as required.

- D. Support the SPR computing needs by continuing the developing and/or acquiring and implementing additional functionality of computer applications service on the Enterprise Resource Planning System or in SharePoint. Build new applications and enhance existing applications utilizing a technology included in the Information Technology Long Range Plan. Develop mobile applications to support internal SPR business process. The mobile apps shall be developed using the technology from the IT Long Range Plan. Develop a plan to migrate existing Java applications to SharePoint. Activities include advising users on the computing capabilities, requirements definition, design, program development, acquisition, implementation, and maintenance of applications. This support will complement and incorporate the Content Management effort which will proceed toward implementation. Continue to develop a Middleware tier architecture utilizing web services to minimize custom integrations between applications to support a seamless enterprise architecture supporting a user portal interface and single sign-on network login. Continue efforts to drive additional value from and utilization of the Systems, Applications, and Products (SAP) solution
- E. Operate and constantly improve a SharePoint Centric Content Management System application to perform combined Records Management and Document Management functions and execute the necessary integration between this system and the other corporate systems, other Content Management Applications (until replaced), and SAP. Incorporate SharePoint as the collaborative and document management phase of the Content Management process.
- F. Implement and administer a security program for classified, unclassified, and unclassified sensitive information in accordance with DOE Orders; maintain and submit revisions to SPR System Security Plans (SSPs); maintain program documentation; implement and perform Continuous Diagnostics and Mitigation (CDM) and periodic risk assessments and vulnerability assessments in accordance with the current Risk Management Approach Implementation Plan (RMA IP), and Federal Information System

Management Act (FISMA) reporting requirements; review new releases of the RMA IP and create an impact assessment report for the implementation plan within 60 days; meet RMA IP plan of action and milestone (POAM) scheduled completion dates; provide annual security awareness training; perform periodic information security audits and penetration testing to ensure compliance with RMA IP. Provide defense-in-depth protection for SPR network, patch operating system (OS) and application vulnerabilities per the SPR Vulnerability Management Procedure, and monitor DOE-JC3 communications for current threats and apply blocks of know malicious sites within 3 business days of release by JC3. Provide for protection of SPR sensitive data by providing encryption for mobile assets as well as digital rights management capabilities for sensitive information. Safeguard protected personally identifiable information (PII), per DOE Memorandum, *Management and Security of Personally Identifiable Information*, dated April 17, 2013, by utilizing processes and solutions to identify unprotected PII on information systems, as well as monitor/prevent loss of PII as provided by applicable DLP solutions. Develop and maintain a disaster recovery/contingency backup plan and operations; this will include the Stennis Alternate work site and the Alternate Data Center (ADC). Prepare an SPR Cyber Security Program Plan as an umbrella document to coordinate the SSPs and other cyber security-related documents as appropriate. Execute CDM for control testing per the RMA IP. Produce annual continuing authority to operate letters per the RMA IP, with full certification and accreditation (C&A) packages every 4 years for SPR unclassified systems, and every 3 years for the SPR classified system. Address all audit and review findings in an adequate and timely manner to ensure compliance with DOE O 205.1B or the most recent guidance included as a contract requirement

- G. Continue performance-based training (training oriented to that required to perform their job duties) for IT personnel and maintain appropriate level of certification for the help desk staff, network engineers, programmers, and cyber security personnel. Support user training and user self-help to further the change management process required when implementing new systems. Indicate innovation as a core value in employees and in planning IT solutions (e.g., embrace cloud computing, social networking tools, IP-based phone switch, etc., as appropriate).
- H. Plan, budget, and acquire information systems, applications, and tools that support SPR information systems and telecommunications requirements using an appropriate Information Technology configuration management

process. Prepare and maintain the SPR Information Technology Long-Range Plan (LRP), prepare budget submittals consistent with the LRP, and prepare the M&O contractor portion of the OMB Exhibit 53's and 300's as required (annually). An Acquisition Strategy shall be prepared and submitted to DOE for all acquisitions exceeding \$250,000 prior to beginning the acquisition procurement process. For all acquisitions less than \$250,000 but more than \$50,000, an Acquisition Summary shall be submitted to DOE before the procurement process. The Contractor shall support and participate in IT Weekly Project status meeting, participate on the SPR Information Technology Planning Committee (ITPC), and participate in the Information Management Council.

- I. Make continuously available to DOE Information Systems and Technical Services staff: Access to Help Desk Management software, Information Technology Equipment Software Inventory, and the Information Technology Project Schedules, and appropriate outputs of the Microsoft System Center Solutions as implemented.
- J. Establish, maintain, and administer a program for effective Information Technology (IT) acquisitions and management consistent with Federal Information Technology Acquisition Reform Act (FITARA) principles. Define and utilize Enterprise Architecture processes for managing IT investments. Leverage blanket purchase agreements (BPAs) and existing contract vehicles such as NASA SEWP and GSA for IT procurements, when appropriate to meet SPR mission needs and providing best value. Define IT project management best practices; and manage, monitor, and control IT projects per defined processes.
- K. Adopt a continuous improvement methodology as a core value in furtherance of innovation and business process improvement.
- L. As directed by SPR management, support and implement DOE-level initiatives such as OneID, Data Taxonomy, and DHS Continuous Diagnostics and Mitigation (CDM), as well as Federal mandates such as Binding Operational Directives (BOD). Respond to external information requests utilizing the data call workflow process.
- M. Annually conduct a survey for the IT Services Questionnaire for all SPR users to gather data on ongoing efforts to improve customer service and more focused and efficient in allocating available resources. Include a user survey at the completion of each IT Request to as the user if the IT services provided

met their needs, and compile these customer satisfactions results for delivery to the DOE IT Director.

- N. Research, budget, and acquire information relating to implementing an extended wireless network at DOE's remote sites.
- O. Operate and maintain the extended wireless network infrastructure at remote sites which will consist of wireless controllers, wireless access points, switches and communications equipment. Additionally, full-time on-site Help Desk support will be required to adequately support remote users at each of the SPR field sites.

II. DELIVERABLES

Deliverables include the following and shall be electronic unless hard copy is requested:

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Information Management Crosscut (E)	Annually per budget reporting requirements (typically April-June)
2. Initial Draft of Information Technology Long-Range Plan (E)	Annually, June 30
3. Cyber Security Program Plan (E)	Initial 2 nd Week in February Final 4 th Week in July (Annually)
4. Information Technology Long-Range Plan, Final (E)	September 30 (Annually)
5. Review and Update documentation to reflect current continuous diagnostics and mitigation methodologies and techniques as implemented in the SPR environment, and produce Continuing Authority to Operate (CATO) Letters (E)	Annually, within 11 months of last signed CATO
6. Project Schedules for projects of durations greater than 2 months or 80 man-hours (E)	Within 60 days of the approved IT Request
7. ADC and Stennis Alternate Work Site Test (E)	Annually (before May 15)

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
8. IT Request ready for SPR IT Qualification Board	Within 45 days of the approved IT Request
9. Publish annual cyber security training for privileged users (E)	August 15 (Annually)
10. Record audit findings in the SPR ATS and create Corrective Action Plan(s) as required. Schedule actions in SPR Plan of Action and Milestones (POAM) as required (E)	60 days from Receipt of Report
11. Vulnerability Status Report to AO (H) to include monthly vulnerability statistics as reported FE	Monthly, draft due to DOE by 7 th of each month
12. RMA IP Impact Assessment Report (E)	60 days from release of a Risk Management Approach Implementation Plan (RMA IP) (formerly PCSP)
13. Complete network incident workflow to capture reported incidents(E)	As required
14. Weekly Status Report with Cyber Security Statistics (E)	Before close of business Tuesday of each week
15. Cyber Security Awareness Newsletter (E)	Quarterly
16. Data Calls (E)	By Workflow due date defined for each Data Call
17. PEMP and CAS Measure Updates Recorded in Score Card (E)	Monthly, by the 6 th day
18. Identification of PII on SPR Information Systems (e.g., scanning or other mechanisms) (E)	Semi-annual for Outlook and File Shares; real-time via AvePoint Compliance Guardian for SharePoint

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
19. Enterprise Application Inventory (IE, MS Office, SharePoint, etc.) to include current version, maintenance end-of-life, and planned upgrade schedule (E)	Annually, with Final Long-Range Plan Submittal (September 30 th)
20. Six-month rolling timeline (high-level) of Data Systems Projects/Efforts or implement a Portfolio-capable tool such as MS Enterprise Project to view categorized projects (E)	Monthly
21. Scanning for PII on PIV 1 network share (E)	Monthly
22. Quarterly Network Circuit Inventory (E)	Quarterly
23. Long Range Plan (LRP) Draft Presentation – The contractor shall formally present the changes to the new version of the LRP document (E)	Annually, with the draft Long Range Plan
24. Alternate Data Center Test Lessons Learned Report (E)	2 weeks after the annual ADC Test
25. Deliver a Lifecycle of Production Hardware Report (E)	Annually, by October 1st
26. Annual ADC Application Certification (E)	Annually, by September 30 th
27. Deliver report on the results from the annual survey for the IT Services (E)	Annually, by September 30 th
28. Vulnerability Metrics for FE (E)	Monthly, by the 22 nd of each month

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Information Technology

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Effective response to data call requests.	Percentage of responses to data calls returned to DOE site requestor by the due date.	90%	97%
2. Cyber Security Provide a high level of integrity for all major systems and major applications.	Effectiveness measures relating to blocked intrusions attempts and timeliness of security patches.	a. Apply 95% (quarterly average) of JC3 blocks to known malicious websites within 3 days of release by JC3 with 0 instances of unrecoverable loss or corruption of data b. Apply 95% of all cyber security patches per the vulnerability management procedure (quarterly average)	a. Apply 98% (quarterly average) of JC3 blocks to known malicious websites within 3 days of release by JC3 with 0 instances of unrecoverable loss or corruption of data b. Apply 98% of all cyber security patches per the vulnerability management procedure (quarterly average)
3. Responsiveness to IT Requests Provide adequate assurance that approved IT requests for new Automated Data Processing hardware, software, or services are processed as necessary to support the SPR mission.	Percentage of new IT Project requests that require an Enterprise Change Proposal presented to the Qualification Board in which the project's schedule has been delivered within 45 calendar days of receiving the request.	85% of all IT Project requests	95% of all IT Project requests

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Information Technology

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
4. Plan of action and milestones (POAMs)	Percentage of plan of action and milestones (POAMs) closed by the scheduled completion date, or by AO-approved extension date.	90%	100%

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Information Technology

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>5. Continuity of Operations for Business Critical Applications</p> <p>Ensure high availability and security of the Crude Oil Sales Offer Program (COSOP).</p>	<p>Continued assurance of the high availability and continuity of operations during Cyber Security attacks and for Disaster Recover events during a sale/exchange.</p>	<p>a. 99.2% availability during normal operations, exclusive of planned downtime, provided by any SPR Network Control Center, Alternate Data Center, or Backup site</p> <p>b. 95% availability within 3 days of catastrophic event</p>	<p>a. 99.5% availability during drawdown, exclusive of planned downtime, provided by any SPR Network Control Center, Alternate Data Center, or Backup site</p> <p>b. 98% availability within 1 day of catastrophic event</p>
<p>6. Information System Availability</p> <p>Assure availability and reliability of business applications necessary to support the SPR mission (Critical Business Applications). Assure access to the Internet and Intranet Portal to the same average percent.</p>	<p>a. Average quarterly percent availability of applications: Exchange, SAP, Crude Oil Valuation Assessment Tracking System (COVATS), SharePoint, and COSOP, exclusive of planned downtime or external impacts.</p> <p>b. Average quarterly percent availability of Network and Application monitoring tools SCOM</p>	<p>a. $\geq 95\%$ Quarterly Average</p> <p>b. $> 97\%$</p>	<p>a. $\geq 98.0\%$ Quarterly Average</p> <p>b. $> 99.0\%$</p>

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Information Technology

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>7. Information Security</p> <p>Assure protection of sensitive Personally Identifiable Information (PII).</p>	<p>Instances of loss of protected PII because of an error or omission in M&O contractor Data Systems technical administration and management of SPRPMO FISMA computing systems, specifically excluding user error and inadvertent access as defined in USE Memo, Security Incident (Including Cyber Security) Notification Protocol, dated August 23, 2013.</p>	<p>Theft, loss, or compromise of PII for less than 100 individuals (reference USE Memo, Security Incident (Including Cyber Security) Notification Protocol, dated August 23, 2013)</p>	<p>0 instances</p>
<p>8. Network Incidents</p> <p>Assure timely response to network incidents and extended network outages.</p>	<p>Use network monitoring tool to SCOM to monitor that critical capabilities of the following applications are available and to minimize Network incidents and outages that impact any of the WAD applications during normal business hours (6:30 a.m.–5:30 p.m., Monday-Friday) (Criteria 6). An incident that impacts the WAD application for a period less than 4 hours is a Network Incident and will be reported in SCOM. An incident that impacts one or more of the WAD applications for a period greater than 4 hours is a Network Outage, exclusive of planned downtime or external impacts.</p>	<p>< 20 Incidents and < 7 Outages</p>	<p>< 10 Incidents and < 4 Outages</p>

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Financial ManagementI. DESCRIPTION OF WORK

Provide financial management functions to assure that those items addressed in the work statements and requirements are accomplished in an efficient manner, provide for continuity of operations, plan for future needs, and establish confidence and credibility for the SPR.

As it relates to accounting and budgeting, develop, implement, and maintain a management control system in accordance with DOE Order 413.1B, Internal Control Program.

Assure the following general accounting and financial reporting requirements are met:

- A. Establish and maintain a financial management system and financial procedures, to include at a minimum, general, expense, and subsidiary ledgers, and related chart of accounts to ensure the submission of accurate and timely financial data to meet DOE reporting requirements and to ensure compliance with the DOE Accounting Handbook.
- B. Perform cash management activities, including the administration of banking agreements, reconciliation of bank accounts, and timely processing and collection of receivables.
- C. Prepare and submit reports to meet customer and internal reporting requirements.
- D. Issue all billings and related transfer statements and analyze and reconcile all financial transactions with other integrated contractors and DOE.

- E. Maintain one cost account system for crude oil.
- F. Provide other accounting data/reports as needed to support DOE oversight.
- G. Formulate and manage a control system designed to certify funds availability before entering into a financial commitment without the obligations necessary to fulfill that commitment.
- H. Maintain and manage a control system designed to capture all financial transactions related to property and inventory, including property and inventory purchased through DOE Direct contracts. System shall ensure that correct capitalization and depreciation processes are in place and generally accepted accounting procedures for recording costs and evaluating assets are followed.
- I. Establish and maintain a financial management system that conforms to Generally Accepted Accounting Principles (GAAP), pronouncements of the Federal Accounting Standards Advisory Board (FASAB), and Cost Accounting Standards (CAS).
- J. Maintain 100 percent of cost ceiling compliance as identified in the Financial Plan and in accordance with the WAD ceilings.
- K. Execute FY 2019 Annual Operating Plan within the associated obligations which are the FY 2018 DOE-approved uncosted obligations and the FY 2019 DOE-approved obligations.
- L. Prepare and submit by the 5th workday of every month, a current listing of open Construction Work in Progress items to DOE Finance and DOE's Support Services Contractor for review. Any discrepancies will be resolved by the 15th workday.

In order to fulfill accounts payable and travel requirements, the following tasks must be accomplished:

- A. Verify the validity of supplier invoices against related purchase orders or subcontracts and process payments in a timely manner.
- B. Process payments for all plant operating expenditures.

- C. Monitor travel expense vouchers against Prime Contract requirements and process for payments, ensuring compliance with annually issued GSA per diem updates.

The following Budgeting activities are required:

- A. Coordinate preparation, submission, and execution of all annual budget request documents, including Base Case request, budget modules, construction budget, and crosscut budget data consistent with DOE Order 130.1, Budget Formulation Process, ensuring compliance with prescribed DOE and PMO budget guidance.
- B. Develop and issue labor (straight time and overtime) and fringe rates for budget requirements.
- C. Execute the FY 2019 Annual Operating Plan (AOP) Straight Time Labor at or below the planned Obligation
- D. Prepare and submit impact assessments per DOE requirements. Deliverables should include explanations which address cause, impact, and proposed resolution. All deliverables should include a summary which addresses significant components of each deliverable.
- E. Review and assist in preparation of requests for project authorization.
- F. Maintain a work package database supporting the annual budget request (including all scenarios) in SharePoint.
- G. Maintain a work package database supporting the monthly budget execution in the Cost Management Report in SharePoint.
- H. Develop and submit to DOE the AOP to include Obligation and Cost Plans that supports and executes DOE priorities. Compliance with SPRPMO Order 130.1C dated July 16, 2015, M&O Contractor's Annual Operating Plan Formulation and Execution must be ensured.
- I. Prepare and issue, monthly, the Cost Management Report (CMR) that includes significant monthly changes (as defined in the Latest Revised Estimate (LRE) deliverable) to the LRE.

- J. Prepare and submit, quarterly, the cost and obligation LRE to include variance analysis explanations that address cause, impact and corrective action.
- K. Maintain a work package database supporting interim and final Revised Cost Plan submittals in SharePoint.
- L. Provide other budget data reports as needed to support Internal Reviews, Office of Management and Budget-Budgets/Inquiries, Congressional Budget-Submissions/Inquiries, and DOE Inquiries/Direction.
- M. Provide overall management of business activities.
- N. Support and implement DOE-accepted/directed budget initiatives.
- O. All budget and cost deliverables will reference the source document that was used to create the deliverable.
- P. Annually identify initiatives that work toward the goal of a 10% reduction of year-end uncOSTed balance.
- Q. By the 3rd business day of every month, prepare and submit a current Individual Priority Listing (IPL) to DOE Finance, DOE APMs, DOE Directors, and DOE's Support Services Contractor.
- R. Within 2 business days of Change Control Board (CCB) approval, forward a list of approved CCB items to DOE Finance for review prior to actual implementation.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Automated Standard Application for Payment (ASAP) Summary (E)	1 st workday (Monthly)
2. Standard Accounting and Reporting System (STARS) Data (E)	Noon 2 nd workday (Monthly)
3. Reconcile Integrated Contractor (IC) trial balance to General Ledger (GL) (E)	15 th of each month
4. Financial Plan Analysis (E)	5 th workday after Issuance of Financial Plan (Monthly)

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
5. Annual Financial Reports and Analysis of Financial Statements (E) and (H)	On or about October 13 (Annually)
6. Deposit and Disbursement Reports (E)	1 st workday (Monthly)
7. Budget Request and to include a review with DOE Budget at least 4 working days in advance of Senior Staff presentation (E) and (H)	In accordance with the annual Budget Request Guidance
8. Cost Management Report (CMR) (E)	On the 15 th workday (Monthly); Variances due on the 15 th workday (Quarterly)
9. Quarterly Straight Time Labor Dollar Tracking Report (E)	On the 15 th workday (Quarterly)
10. Annual Statement of Cost Incurred (E)	November 12 (Annually)
11. Annual Operating Plan (AOP) and to include a review with DOE Budget at least 4 working days in advance of Senior Staff presentation (E)	As established by the AOP Schedule of Activities
12. Cavern Remediation, Degas, and other special reports as requested by DOE (E)	15 th of each month
13. Cost Underrun Utilization (E)	15 th workday in October for the prior fiscal year
14. Contingent Liabilities (E)	15 th workday of 3 rd and 4 th Quarter
15. Report of Crude Oil Inventory by Valuation and Trial Balance (E)	15 th workday (Monthly)
16. Institutional Cost Report (E)	10 th workday (December) (Annually)
17. Construction Work in Progress – Listing of Open Items (E)	5 th workday (Monthly)
18. Commercial Banking Statistics (E)	12 Working Days after Quarter End (Quarterly)

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
19. Letter of Credit Pricing Calculation Worksheet (E)	Within 24 Hours of Contract Execution for Exchange Program and Within 24 Hours of Execution of the Notification of Apparently Successful Offeror for Sale Drawdowns
20. Purchase Request (PR)/Purchase Order (PO) Aging Analysis Report (E)	Submit January, April, July, and September, with justification as to why any PO older than 180 days and any PR older than 90 days are still open and what actions are being taken to close them
21. Annual analysis of execution of obligations vs. the Final AOP baseline and beginning uncOSTed obligation balance	15 th workday in October for the prior fiscal year
22. Annual Improper Payment and Payment Recapture Audit (E)	On or about the 15 th workday after the end of the 3 rd Quarter
23. Latest Revised Estimates and Obligation Plan with Variance Analysis and to include a review with DOE Budget at least 4 working days in advance of Senior Staff presentation (E)	Present DOE Budget: April 25, July 25, September 5 Present DOE Senior Staff: May 2, August 1, September 12
24. Latest Revised Estimates and Variance Analysis for exceptions only for major program drivers known and increases/decreases exceeding \$100,000 (E)	Update for exception changes by the 15 th of each month
25. Headcount/Staffing Profile and Variance Analysis	5 th workday (Monthly)
26. Current Individual Priority Listing (E); Report current listing at each Project Review	3 rd workday (monthly)

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

27. List of approved Change Control Board (CCB) items for DOE review prior to actual implementation; Report current listing at each Project Review

2nd workday after CCB approval

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Financial Management

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Provide Financial Management Processes and Systems that ensure accuracy in the financial statements.	a. Submission of Oil Inventory Valuation without errors. b. Submission of the monthly Integrated Contractor file without errors. No more than two submissions to meet target.	a. Zero b. Noon 2 nd Workday of the Month	a. Zero b. 1st Workday of the Month
2. Transfer completed Construction Work in Progress (CWIP) costs to the Property, Plant, and Equipment Account within 6 months of completion.	Number of completed CWIP transactions not capitalized within 6 months of completion.	Zero	Zero
3. Execute FY 2019 Annual Operating Plan (AOP) within Cost and Obligation established for the Final AOP for FY 2019.	a. Actual FY 2019 Cost executed to be consistent with total DOE-approved Cost established for the Final AOP for FY 2019 which includes BCRs processed during the fiscal year. b. Actual FY 2019 Obligations executed to be consistent with and not exceed the total DOE-approved Obligations established for the Final AOP for FY 2019 to include BCRs processed during the fiscal year.	a. 90% b. 100%	a. 95% b. 100%

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Property ManagementI. DESCRIPTION OF WORK

The Property Management resources are based on the Fiscal Year Contract Budget Base and support property management activities in New Orleans, including Stennis Space Center, Mississippi, and the following SPR oil storage and distribution facilities:

- A. Bayou Choctaw, Iberville Parish, Louisiana.
- B. West Hackberry, Cameron Parish, Louisiana.
- C. Big Hill, Jefferson County, Texas.
- D. Bryan Mound, Brazoria County, Texas.

The Contractor shall maintain and administer property management systems for personal property, real property, and all Government-owned, rented, or leased motor equipment, motor vehicles, watercraft, and aircraft as described in Part A (Personal Property) and Part B (Real Property) below:

PART A - PERSONAL PROPERTYI. DESCRIPTION OF WORK

The Contractor shall use sound business practices, DOE Order 580.1A, DOE Personal Property Management Program, Federal Personal Property Management Regulations and such directives or instructions that the DOE Property Administrator may from time to time prescribe. The contractor's property management systems must be compatible with the Government's systems Energy Asset Disposal System (EADS), Property Information Database System (PIDS), GSA Fleet Drive-Thru, GSA Federal Fleet Management System (FedFMS) and the Federal Automotive Statistical Tool (FAST) so that data and reports generated by the contractor can be

used by the Government. As a minimum, the contractor's systems must include property management life cycle procedures for: (1) Requirements Determination; (2) Acquisition; (3) Accountability, Utilization, and Controls; and (4) Disposal.

The Contractor shall also develop, implement, and administer policies and programs for effective and economical management of Government property to include as a minimum:

- A. Plan and schedule property requirements to assure that supplies and equipment are readily available to satisfy program needs while minimizing operating costs and inventory levels.
- B. Maintain complete and accurate inventory control and accountability records.
- C. Proper care and securing of property to include storage, handling, preservation, and preventive maintenance.
- D. Identify property excess to the needs of the organization and dispose of excess storage through transfer, donation, or sale.

The Contractor shall maintain a personal property balanced program to assure objectives of the property management system are being accomplished. Property performance will be documented and compared to established goals and/or standards. Surveillance areas and goals and/or standards will be jointly developed annually by the SPRPMO Organizational Property Management Officer or the DOE Property Administrator and the Contractor Property Management Officer. The Contractor is to conduct periodic management reviews to assure compliance with prescribed policies, regulations, standards, and procedures.

The Contractor shall effectively provide warehouse management to include open, covered storage and lay down areas. Although the St. James Terminal is not used by the SPR, personal property items are housed on site and the Contractor is required to complete an annual inventory.

The Contractor shall manage the GSA Fleet Drive through portal for all GSA-leased vehicles and the GSA Federal Fleet Management System (FedFMS) for all DOE-owned vehicles. The Contractor shall input, update, and make any necessary adjustments to maintain the accuracy and completeness of the annual motor vehicle data using the Federal Automotive Statistical Tool (FAST), an internet-based reporting tool.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Physical Inventory Results (E) <ul style="list-style-type: none"> • Ammo – Camp Beauregard, Pineville, LA • Technical Industries, Channelville, TX 	Within 30 workdays of occurrence
2. Property Survey Report (Report of Lost, Missing, Damaged or Destroyed Property) (E) and (H)	Within 7 workdays of occurrence
3. Report of Personal Property Furnished to Non-Federal Recipients (E)	1 workday after October 15
4. Annual Head Quarters Personal Property Reporting (E) and (H)	1 workday after December 15
5. Property Information Database (PIDS) Report (E)	1 st workday in December
6. Precious Metal Forecast Report (E)	1 st workday in September
7. Annual Negotiated Sales Recipients Report (E)	1 workday after October 15
8. Annual Inventory Plan and Schedule Requirements (E)	Annually October 15 th
9. Perpetual/Physical Inventory Results (E)	November 30 th
10. Excess Property Identification and Disposal (E)	Throughout FY
11. Property Management System Approval (E)	Every 3 years (Next Due 2018)
12. Report of Exchange/Sale (E)	1 workday after October 15

Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

13. Vehicle Requirement Data Sheets (VRDS) (H)	1st workday in November
14. Annual Agency Report of Motor Vehicle Data Federal Automotive Statistical Tool (FAST) (E)	1 workday after October 15
15. Report of Exempted Motor Vehicles (E)	On Request
16. EPAct 2005 Section 701 – Waiver Request (E)	Mid-June
17. OMB A-11 – Budget Estimates (E)	Mid-August

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Property Management - Part A - Personal Property

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. <u>Personal Property Management:</u> Establish, implement, and maintain a written personal property system that: <ul style="list-style-type: none"> a. Provides for the efficient, life-cycle management (from acquisition to disposition) of DOE-owned personal property accountable to its contract; b. Incorporates the uniform principles, policies, standards, guidance, and performance expectations of the DOE personal property management program; and c. Is consistent with the terms and conditions of the contract and prescribed Federal statutes and regulations. 	Fiscal Year Annual Personal Property Requirements are met.	80 percent	90 percent

PART B - REAL PROPERTY**I. DESCRIPTION OF WORK**

The Contractor shall use sound business practices, Federal and DOE Property Management Regulations, and such directives or instructions that the DOE Realty Officer/Facilities Information Management System (FIMS) Administrator may from time to time prescribe. The contractor's property management systems must be compatible with the Government's systems (FIMS) so that data and reports generated by the contractor can be used by the Government. must include property management life cycle procedures for: (1) Requirements Determination; (2) Acquisition; (3) Accountability, Utilization, and Controls; and (4) Disposal.

The Contractor shall also develop, implement, and administer policies and programs for effective and economical management of Government property to include as a minimum:

- A. Plan and schedule property requirements to assure that supplies and equipment are readily available to satisfy program needs while minimizing operating costs and inventory levels.
- B. Maintain complete and accurate inventory control and accountability records.
- C. Proper care and securing of property to include storage, handling, preservation, and preventive maintenance.
- D. Identify property excess to the needs of the organization and dispose of excess storage through transfer, donation, or sale.

FIMS is the physical assets database for DOE. The contractor shall input, update, and make any necessary adjustments to maintain the accuracy and completeness of the real property data elements within this system. The contractor, in coordination with DOE, shall conduct a FIMS Validation as required by DOE Headquarters on an annual basis. This will entail reviewing a random sample of records in the FIMS Data Base and comparing the data to related source documents for accuracy. Guidance is provided annually by DOE Headquarters.

The Contractor shall effectively manage (office, warehouse, and special purpose) spaces for SPR mission. The spaces include DOE-owned, leased, or controlled facilities and contractor leases. The Contractor is to optimize space utilization, to plan and execute office relocations, and ensure that occupied spaces are maintained at the highest level of physical and environmentally safe conditions.

It should be noted that although the full range of property management resources and the activities associated with the effective and economical management and operation of the St. James Terminal 36-inch Bayou Choctaw pipeline and 40-inch and 30-inch Bryan Mound pipelines is not applicable since they are not used by the SPR even though it is still in DOE's real property inventory. However, the St. James Terminal and the 36-inch Bayou Choctaw pipeline are outgranted to Shell Oil Products U.S. and monitored through the annually conducted Lease Performance Evaluation process. The 30-inch and 40-inch Bryan Mound pipelines are outgranted to ExxonMobil and monitored through the annually conducted Lease Performance Evaluation process.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Annual Status of SPR Real Estate Acquisition Report (E)	Mid-February
2. Update FIMS database and secure source documents to support annual validation (E)	End-June
3. Report and management and/or operational work activities to be conducted on leased office, warehouse and/or special purpose space (E)	Within 24 hours of notice of proposed activity or within 1 hour of notice from duty officer of an emergency action.
4. Annual condition survey of all property assets (E)	End-June

WAD NUMBER: 2019-1.T
 PERFORMANCE AREA: Technical Support and Management - Property Management – Part B – Real Property
 FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>The Contractor shall ensure the proper stewardship of DOE-owned real property assets</p> <p>a. The Contractor shall also ensure that the data entered into FIMS is comprehensive, accurate, complete, and up to date and matches the information on the current source documents</p> <p>b. Through active, value-based, and informed management processes that ensure the existence of adequate real property assets fully capable of meeting mission requirements under physically and environmentally safe conditions.</p>	<p>a. Percent of accurate data included in FIMS elements based on data analysis or sampling methods.</p> <p>b. Percent of work action reports provided in accordance with requirements</p>	<p>a. 100% accuracy for FIMS Validation Performance Measures which comprises the following data elements: Assets utilized; Replacement Plan Value; Deferred Maintenance; Operating Cost (site-level); Annual Actual Maintenance (asset level); and Annual Rent. 90% accuracy for the remaining FIMS data elements</p> <p>b. 90% accuracy of data</p>	<p>a. 100% accuracy of all FIMS data elements</p> <p>b. 100% accuracy of data</p>

PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Property Management – Part B – Real Property

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
c. The Contractor shall conduct an annual survey of each real property asset identifying deficiencies that affect employee safety, mission readiness, operational safety, work health, environmental protection and compliance, security and property preservation.	c. Percent of accurate data in the annual condition surveys	c. 85% accuracy of data	c. 100% accuracy of data

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Human ResourcesI. DESCRIPTION OF WORK

Manages and directs an organization which provides for labor compliance, compliance with DOE Regulations, policy and procedure development, implementation and interpretation, responsible for personnel administration for the sites and New Orleans, Equal Employment Opportunity (EEO) administration, employment, compensation, employee relations, medical services, employee assistance program, manpower planning, organization, control staffing plan program, and training and development activities.

A. Personnel and Human Resources:

1. Maintain and monitor an effective automated Human Resources Information System as well as maintain all personnel records, to include SAP Human Resource functionalities implemented.
2. Administer a comprehensive pay and benefits program to provide cost-effective compensation and benefit package to attract and retain competent workforce and maintain compliance with applicable State and Federal regulations. Maintain a total compensation package within industry standards.
3. Administer employment programs for recruitment, hiring, promotions, transfers, relocations, redistribution of workforce, layoffs, outplacement, and terminations.
4. Administer 401K programs and COBRA-required benefits programs.
5. Maintain effective and harmonious employee relations ensuring full compliance with all applicable Federal and State legislation.

6. Coordinate effective negotiations and administration of relevant collective bargaining agreements ensuring full compliance with applicable Federal and State guidelines.
7. Develop, implement, and maintain an effective EEO and Diversity policy and program, consistent with the approved Diversity Plan. Develop, implement, and maintain an Affirmative Action program that will hire and promote minorities, females, veterans, and persons with disabilities. Both programs shall include appropriate involvement with community agencies, schools, colleges, and organizations that positively impact the advancement of minorities, females, veterans, and persons with disabilities.
8. Maintain an effective Employee Concerns Program consistent with all applicable Directives.
9. Maintain an effective fitness for duty program for all employees and an Employee Assistance Program (EAP) for employees and eligible dependents.
10. Maintain an effective occupational medical program in compliance with applicable DOE Orders.
11. Assure the effective and efficient administration of all employee recognition programs.
12. Provide timely response to any DOE requests for special studies, analyses, reports or other activities.
13. Perform all administrative functions related to health benefits and insurance activities for employees and their dependents, including the recoupment of costs over the \$150,000 threshold.
14. Maintain an orderly and efficient assignment of duties and responsibilities for the economical accomplishment of the work. Each position systematically planned so that it is logical and consistent internally and fits with other positions into an orderly, productive, and efficient organization.

B. Training and Development

1. Implement, operate, and maintain a learning management system that will ensure effective and efficient training and personnel development programs.
2. Implement a company-wide training policy which includes: authority, responsibility, administrative controls, and a systematic approach to the development of technical training and employee professional development programs.
3. Evaluate training programs to ensure effective use of budgeted funds.

II. DELIVERABLES

Deliverables include the following:

Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy) Due

Personnel and Human Resources:

- | | |
|--|---|
| 1. Employee Assistance Program Report (H) | November 15 |
| 2. Report of Work Force Restructuring (E) | As required |
| 3. Report of Contractor Expenditures for Employee Supplemental Compensation (E) | March 1 |
| 4. Affirmative Action Plan/Report (H) | May 15 |
| 5. Diversity Plan Updates (E) | 30 days prior to start of fiscal year
(August 30 of each year) |
| 6. Report Percent of Non-Legally Mandated Fringe Benefit Rate to Total Labor (E) | Monthly |
| 7. Contractor Salary Wage Increase Expenditure (E) | March 1 |

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
8. Report of program drug and alcohol testing results consistent with 10 CFR 707 and separate reports on each lower tier subcontractor from maintained records pursuant to applicable Directives (H)	Semiannual January 15 and July 15
9. Monthly Headcount Reports (E)	The Thursday prior to the Project Assessment Briefing, usually the third Thursday of the month
<u>Training and Development</u>	
10. Annual Training Plan for Next Fiscal Year (October 1 – September 30) (H)	September 1 of each year
11. Annual Report of E-Learning Usage and Compliance (E)	Annually by September 30
12. A list of employees who attended training in excess of 200 hours per employee in the past fiscal year. The list will include employees name, location and title of training, and number of hours of training (E)	September 30

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Human Resources

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURES	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>1. An effective Human Resources program to include efficiencies in staffing, compensation, benefits, and employee relations.</p> <p>a. Compensation.</p> <p>b. Affirmative Action.</p>	<p>a. M&O contractor average salaries/wages to market reference value midpoint.</p> <p>b. Percentage of under-utilized categories as identified in the annual Affirmative Action Plan (where opportunities exist (new hire/promotion: 1 hire, 2 promotions)).</p>	<p>a. 80 percent</p> <p>b. 50 percent</p>	<p>a. ≤ 120 percent</p> <p>b. 75 percent</p>
<p>2. Ensure the implementation of an effective training program by measuring training completion and effectiveness.</p>	<p>Regulatory/compliance using basic qualifications training completed and recorded in SAP for all employees within 30 days.</p>	<p>95 percent</p>	<p>98 percent</p>

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management – Safety and HealthI. DESCRIPTION OF WORK

The Contractor shall develop and implement a safety and health management system that identifies and controls workplace hazards and integrates safety and health into all phases of work planning and execution. The program shall encompass all SPR Government-owned and Government-leased facilities and operations as well as M&O Contractor-leased facilities operated with federal funding and used in support of SPR operations. The resulting safety and health program shall:

- a. Strive to reduce the risk of occupational injuries and illnesses, first aid cases, and safety-related incidents; and
- b. The program shall maintain and adopt the highest standards of performance (i.e., the Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP) criteria) and implement an Integrated Safety Management (ISM) System, ensuring the safe and healthful operation of facilities and protect workers and the public; and
- c. Emphasize management's overriding dedication to safety over schedule and cost; and
- d. Ensure safety is a precondition for all work performed to include a graded and tailored approach as part of activity-based work planning and preliminary job walk downs; and
- e. Emphasize identification and control of workplace hazards, and implementation of a hierarchy of controls per ISM standards; and
- f. Encourage worker participation in reviewing work activities, identifying associated risks and implementing corrective measures; and

- g. Ensure that workers possess a questioning attitude with respect to safety, can report unsafe acts without retribution, have effective avenues to provide input to safety policies, and procedures, and that workers on any SPR facility or remote work location have the right and responsibility to stop work in the event they observe an unsafe act or if they feel uncertain that the work can be performed safely; and
- h. Promote a safety culture that is resilient to organizational drift and focuses on continuous improvement in safety vs. mere compliance; and
- i. Implement an integrated Industrial Hygiene program based on the principles of workplace evaluation, sampling and analysis methodologies of the American Industrial Hygiene Association's, *A Strategy for Assessing and Managing Occupational Exposures*, 4th edition.

The safety and health program will be guided by an Integrated Safety Management System (ISMS) through application of ISM principles, and shall integrate safety into management and work practices affecting all functional areas, including, but not limited to: operations, finance, human resources, subcontractor management, maintenance, engineering design, construction, security, property control and procurement. The ISM System shall:

- a. Include behavioral safety, or a similar peer-to-peer observation and feedback process and
- b. Keep all Accident Prevention Manual (APM) sections current and updated in compliance with OSHA and other applicable Federal and State requirements, applicable DOE and SPRPMO requirements, and as required to maintain OSHA Voluntary Protection Program (VPP) Star status certification at all four sites; and
- c. Include a process for self-assessment, to include safety culture, the timely correction of identified deficiencies, and a feedback and improvement process; and
- d. Identify and control hazards to prevent and mitigate incidents before beginning work activities, with a focus on high-consequence events resulting in unacceptable consequences; and
- e. Track and manage risks, working to reduce risk to a level acceptable to senior management; and

- f. Continuously monitor organizational performance indications to self-identify safety problems and help plan specific improvement actions; and
- g. Operate a training program which integrates safety culture into ES&H annual refresher training and ensures that all personnel possess the experience, knowledge, skills, and abilities necessary to discharge their safety and health responsibilities; and
- h. Use and share lessons learned, operational experiences, incident causal analyses, and cross talks to improve safety systems across the SPR.

The safety and health program shall comply with the DOE Acquisition Regulation clause located at the Code of Federal Regulations, Title 48, Part 970, Section 5223-1, DOE Order 231.1B, Admin Change 1, Environment, Safety and Health Reporting; DOE Policy 450.4A, Change 1, Integrated Safety Management Policy; SPRPMO M-450.1-1B, the SPRPMO Environmental, Safety and Health Manual, Chapter 3, Safety and Health; SPRPMO N-450.4, Implementation of Environmental, Safety and Health Contractor Requirements Documents; SPRPMO N 450 series SPR Environmental, Security, Safety and Health, and Emergency Preparedness Goals Fiscal Year 2019; SPRPMO 0037, Integrated Safety Management System Description; the Code of Federal Regulations, Title 29, Parts 1904, 1910, 1917 and 1926; the Code of Federal Regulations, Title 49, Part 195, Transportation of Hazardous Liquids by Pipeline, Louisiana Administrative Code, Title 43, Part XVII, Natural Resources Office of Conservation – Injection and Mining, Subpart 3, Texas Administrative Code, Title 16, Part 1, Chapter 3, Rule 3.95, Underground Storage of Liquid or Liquified Hydrocarbons in Salt Formations, and DOE STD 6005-2001, Industrial Hygiene Practice. The Contractor shall provide support to DOE and all Contractor elements for the implementation of, and compliance with, the safety and health elements of all DOE and SPRPMO Orders, Policies, Notices, Manuals, and Standards that apply to this Contract.

II. DELIVERABLES

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

1. Individual injury and illness reports must be submitted electronically using the Computerized Accident/Incident Reporting System (CAIRS), as required by DOE O 231.1B (E)

New Injury and Illness Reports: Twice per month, on or before the 15th of the month and the last working day of the month. Initial reports must include the actual number of days away, restricted or transferred (DART) as of the date of the report.

Revised Reports:
Revisions to lost work time and any information initially reported will be submitted quarterly, by the 10th day of the month following the end of each calendar quarter until the case is closed.

2. Tabulation of work hours for all SPR Organizational Codes in CAIRS (E)

October 10, January 10, April 10, and July 10

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due

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| <p>3. Conduct an effective causal analysis using a graded approach that is appropriate to the complexity of the situation. May be conducted in conjunction with DOE directed investigations. Root cause analyses shall be conducted by a person trained in the method used (e.g., TapRoot, 5-Why Analysis, Fishbone Diagram) and include accurate and complete descriptions of the event (including photographs as appropriate) to support identified causes, all root/contributing /direct causes with substantiating details, casual analysis method used, proposed corrective actions/recommendations and implementation schedules/data to mitigate identified causes, and the person(s) performing/leading the analysis. Findings for root cause analyses shall be entered into ATS. (E)</p> | <p>Within 24 hours and in compliance with DOE 232.2A.</p> |
| <p>a. Root cause analysis for vehicle accidents</p> | <p>Within 30 calendar days after date of accident.</p> |
| <p>b. Root cause analysis for recordable injury or illness cases resulting in Days Away, Restricted Work or Job Transfer (DART).</p> | <p>3 days before new Individual Accident/Incident forms are entered into CAIRS.</p> |
| <p>c. Root cause analysis for other conditions or events with a health or safety concerns identified by management.</p> | <p>Within 45 calendar days after identification of issue.</p> |
| <p>d. Root cause analysis for Process Safety Management (PSM) compliance issues identified by management.</p> | <p>Within 45 calendar days after identification of issue.</p> |

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
4. Quarterly Safety, Industrial Hygiene and Recordable Injury Quarterly Report, to include:	7 calendar days after the end of the quarterly period
a. Quarterly and Cumulative Fiscal Year-to-Date Days Away, Restricted Work or Job Transfer (DART) Case Rate for:	February 15
i. M&O contractor and its subcontractors only (E)	February 15
ii. M&O contractor and its subcontractors only (E)	February 15
b. Quarterly and Cumulative Fiscal Year-to-Date Total Recordable Case (TRC) Rate for the:	November 30
i. M&O contractor and its subcontractors only (E)	Weekly, Mondays at noon
ii. M&O contractor, its subcontractors, DOE, and its Prime Contractors and subcontractors (E)	Annually, each fiscal year prior to September 30
c. Separate Cumulative Fiscal Year-to-Date Lists, with descriptions, of recordable injury or illness cases and vehicle accidents for M&O contractor, its Subcontractors, DOE, and its Prime Contractors and Subcontractors, by Occurrence Date (E)	By March 30 and September 30
d. All disciplinary actions and/or enforcement actions related to safety and health (inclusive of FFPO and Contractors) (no sensitive/PII information) to include (E):	
i. Date of initiating safety and health event	
ii. Description of safety and health event	
iii. Job classification	As Required by 29 CFR 1910.119 (O)

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
iv. Employer	7 calendar days after the end of the quarterly period
v. Description of disciplinary action and/or enforcement	Weekly every Thursday before 10:00 a.m. send updated report to the SPR ES&H Director and the DOE Safety Staff; also copy the DOE Assistant Project Managers
e. FY 2019 Annual Milestone/Deliverable statuses	On the first Thursday of each month
f. A report analyzing safety and IH training to include (but not limited to):	Annually per TSM WAD No. 2018-1.T
i. Training completion goals and number of completed and in complete training for each target audience category.	Quarterly and Cumulatively
ii. Code each class with Safety (SAF), industrial hygiene (IH), or OSHA required (OSHA)	Special emphasis assessment due at the end of FY 2019
iii. Include performance measure calculation	End of second of 2019
5. Annual Voluntary Protection Program (VPP) Self-Assessments of Site Safety and Health Report sent to OSHA and DOE VPP for each site (E)	February 15
6. Review and update SPR Contractor Integrated Safety Management (ISM) System Description (E)	November 30
7. SPR ISM System FY 2018 Annual Review and update report (E)	February 28
8. Brief FY 2018 ISM System Annual Review to the SPRPMO PM and communicate results to the SPR sites	No later than March 31

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due Date</u>
9. Conduct special assessment of the effectiveness of ISM Principle No. 6(hazard controls tailored to work being performed) across the SPR:	March 29
a. Using DOE G 450.4-1C Attachment 1 as a guide	
b. Includes FFPO and Subcontractors	
c. Include how effectively are JHAs used and the effectiveness of JHAs for line breaks	Before September 30
d. Provide briefing to SPR Project Manager (as standalone or part of Project Review)	Within 7 business days after the end of each month
10. Submit an updated weekly First-Aid and Recordables Report (E)	Weekly every Thursday before 10:00 a.m., send updated report to the SPR ES&H Director and the DOE Safety Staff
11. Safety and Industrial Hygiene Survey of Firing Range (E) and (H):	August 31 or as required
a. Provide a report evaluating all Safety and Health requirements included in DOE O 473.3 Attachment 2, Sections I-L, APM Sections 9 (Bloodborne Pathogens), 15 (Electrical Safety-Related Work Practices), 23 (Hazard Communications Program), 26 (Industrial Hygiene Program), 36 (Hearing Conservation), 50 (Carcinogens), 55 (Pressurized Compressed Air and Gas). This report may be included in other contractor range assessment reports or as a separate document.	Annually, each fiscal year prior to September 30

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due Date

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| <p>12. Process Safety Management Compliance Audits (E):</p> <p>a. With a special emphasis assessment on Management of Change as defined by 29 CFR 1910.119 (I) for FY 2019.</p> <p>b. Develop and submit the audit lines of inquiry questions to DOE for concurrence.</p> | <p>As Required by 29 CFR 1910.119 (O)
(next regulatory due date is December 2019)
Special emphasis assessment due at the end of FY 2019</p> <p>End of second quarter of FY 2019</p> |
| <p>13. Industrial Hygiene Exposure Assessment plans: For each exposure assessment plan submitted, include the elements below (E):</p> <p>a. General plans shall include the risk ranking of the exposure or operation of interest, if determined, the similar exposure group, and a justification of the risk ranking including any existing data from exposure monitoring, direct readings, or operational experiences.</p> <p>b. Special and Incidental exposure assessment plans shall include a detailed description of the operation, known existing controls, sampling strategy, sampling methods, analytical methods, and applicable Occupational Exposure Limits (OEL's).</p> | <p>August 31 or As Required</p> <p>By end of the quarter for the following quarter for general plans</p> <p>Prior to execution for special and incidental plans</p> |

<u>Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due Date</u>
14. Support sites in an annual evaluation of the site real property in support of Technical Support and Management WAD No. 2019-1.T by identifying building deficiencies that affect employee safety and/or health. Deficiencies may include, but are not limited to: evidence of water intrusion from all sources, evidence of poor humidity control, evidence of active fungal growth, pest infestations, IH monitoring with results of Indoor Air Quality problems, electrical system deficiencies, other mechanical system deficiencies. Deficiencies that pose a (E)	As Required by 29 CFR 1910.119 (O)
15. Provide input to SPR Annual Report and FE Annual ES&H Data Call):	As scheduled
16. Project/Program Review Safety and Health Slides (E)	Quarterly
17. Conduct an SPR ES&H Summit	Before September 30
18. Safety Culture Assessment Report and Briefing (E):	July 31
a. Using DOE G 450.4-1C Attachment as a guide, assess the safety culture across the SPR	
b. Includes FFPO, Contractors, and DOE	
c. Provide briefing to SPR Project Manager (as standalone or part of Project Review)	
19. Develop a Safety Culture Sustainment Plan (E)	Before September 30
20. Heroes for Zero Data Submittals (E)	Within 7 business days after the end of each month

Deliverable (E = Electronic via Link to a Document Management System, H = Hardcopy)

Due Date

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| 21. Conduct Two Tripartite Safety Council Meetings developing agendas and Writing meeting minutes | As Required |
| 22. Safety and Health CAS Update (E) | August 31 or As Required |
| 23. Workover Safety Reports, Rig Inspection Reports, VOC/Benzene Sampling Log, Heat Stress Log (E) | Daily or As Required |
| 24. Notification with supporting details of Industrial Hygiene overexposures/suspected overexposures (Hydrogen Sulfide alarms, VOC alarms, Benzene alarms, and/or quantitative monitoring results above the ACGIH limits) | Within 24 hours and in compliance with DOE O 232.2A |

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management – Safety and Health

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURES	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Safety Statistics	a. Days Away Restricted /Transferred (DART) Rate per 200,000 worker hours (M&O contractor and M&O contractor’s subcontractors).	1.50 Cases	≤ 0.90 Cases
	b. Total Recordable Case (TRC) Rate per 200,000 worker hours (M&O contractor and M&O contractor’s subcontractors).	2.80 Cases	≤ 1.40 Cases
2. Safety Performance	Number of incidents that include any of the following:	Zero Incidents	Zero Incidents
	a. A work related fatality, or b. A single incident requiring in patient hospitalization of 1 or more M&O contractor or M&O contractor’s subcontractor employees, including any amputation or loss of an eye.	One Incident excluding fatalities	Zero Incidents

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management – Safety and Health

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURES	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>3. Industrial Hygiene Performance</p> <p>970.5223-1 (c) (5): Provide feedback on adequacy of controls and continue to improve safety management</p> <p>970.5223-1 (g): The contractor shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements and the system</p>	<p>Corrective Actions to a DOE Finding (as communicated to M&O Contractor’s S&H oversight office) entered into the Action Tracking System (ATS)</p>	<p>80% of all DOE-initiated, Industrial Hygiene-related ATS corrective actions (assigned to New Orleans or the Sites) submitted and approved within 45 days.</p>	<p>100% of all DOE-initiated, Industrial Hygiene-related ATS corrective actions (assigned to New Orleans or the Sites) submitted and approved within 45 days.</p>

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management – Safety and Health

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURES	FY 2019 OUTPUT	
		MINIMUM	TARGET
<p>4. Industrial Hygiene Training: 970.5223-1 (b)(3): Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities</p> <p>SPRPMO O 420.1D Attachment 1: Establish clear and unambiguous roles and responsibilities for the conduct of all SPR activities.</p>	<p>Completion of all M&O-identified and regulatory-required safety training for M&O employees.</p> <p>Industrial Hygiene-Related Training for IH technicians, safety personnel with IH-related responsibilities, operations/maintenance personnel with IH responsibilities, and supervisors/managers with IH-related responsibilities</p> <p>(OSHA) OSHA Required Training weight: 0.5 (SAF) M*O Identified, non-OSHA Required training: 0.25 (IH) IH-related training weight: 0.25</p> <p>Formula: (%complete OSHA) (.5) + (%complete SAF) (.25) + (%complete IH) (.25) =total % complete</p>	<p>80% of all personnel with IH responsibilities trained by the end of the second Quarter 2018</p> <p>Must maintain a minimum of 80% for each quarter to achieve minimum annual performance.</p>	<p>90% of all personnel with IH responsibilities trained by the end of each quarter.</p>

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Fire Protection/Emergency ManagementI. DESCRIPTION OF WORKFire Protection

The Fire Protection program provides engineering and technical oversight to ensure that SPR fire equipment and systems are maintained in a manner to prevent, detect, and mitigate fires. This will be accomplished through operational readiness inspections; sound engineering design and construction review, and proper checks of fire protection systems and equipment for protecting the public, employees, and property from fire losses. The program will provide for training and certification of Emergency Response Team (ERT) personnel in accordance with DOE *Facility Safety* directives, National Fire Protection Association (NFPA) requirements, Occupational Safety and Health Act (OSHA), and other applicable standards. Verification of the reliability of fire detection and suppression systems shall be accomplished by the thorough-conduct of tests, independent audits, and inspections of fire systems and equipment. The Fire Protection Program and procedures will be compliant with NFPA and other fire-related standards and requirements applicable to the SPR.

Emergency Management (includes Emergency Preparedness and Response)

The disciplines of emergency preparedness and response form the emergency management program. Emergency Management will develop and implement all-hazards planning, preparedness, and response capabilities to ensure timely and effective all hazards response to events that may adversely affect the health and safety of the public and employees, for protecting property and the environment, and ensuring drawdown operations in the event of emergencies. The program will provide for: maintenance and inspection of emergency facilities and equipment; training of the ERT personnel; emergency drills and exercises at each SPR site in compliance with DOE and SPR Orders and Federal and state regulations; the updating of current emergency plans and procedures based on site specific hazards; the initiation and maintenance of Basic Ordering Agreements (BOAs) and mutual

aid agreements for response organizations; and coordination with Federal, state, and local, agencies. The disaster recovery program provides the SPRPMO a plan to enable SPRMO and the M&O contractor with temporary facilities and equipment necessary to continue the essential functions of SPR operations and business recovery. The M&O contractor will develop disaster recovery procedures as part of an integrated Continuity of Operations Plan (COOP). The Disaster Recovery/COOP Program must include the Stennis and NOLA Warehouse, stored equipment, and functional areas.

The Contractor shall perform the following Emergency Management and Fire Protection/Disaster Recovery/COOP activities:

- A. Organize and maintain an Emergency Response Organization (ERO) that includes qualified ERT members at each storage site and Emergency Management Teams (EMTs) at the SPR.
- B. Staff and maintain Mutual Assistance Agreements with local area mutual assistance associations, local Government emergency directors, fire departments, sheriffs, and other agencies where possible and as appropriate.
- C. Assure response readiness for the emergency cadre. This includes emergency cadre lists are current, and cadres are trained and qualified, and they are available for immediate response with the required equipment. Conduct communication tests for ERT and EMT personnel.
- D. Maintain a comprehensive Emergency Management Program plan and facility/site specific implementing emergency response procedures as required by State and Federal regulation, including OPA 90 and DOE Order 151.1D, for timely emergency response. Update and revise all developed plans and procedures as required. Coordinate emergency plans with off-site agencies such as the Local Emergency Management Committees and local law enforcement agencies.
- E. Ensure the SPR properly maintains emergency facilities and equipment to:
 1. Operate an SPR Emergency Operation Center (EOC) in New Orleans and a facility EOC at each storage site and Stennis, and predesignate appropriate alternate off-site EOC facilities for each location as required by DOE Orders and local requirements.

2. Operational communications with the ability for communication capability with emergency responders and DOE Headquarters EOC.
 3. Develop procedures that implement or recall capability during emergency or COOP operations.
 4. Respond with emergency equipment for initial emergency response such as first aid, medical treatment, emergency transportation, communications equipment, fire protection equipment, and spill response equipment at each storage site.
- F. Maintain and operate adequate mobile/portable EOC and Emergency Communication Equipment in coordination with the DOE Emergency Communication Network (ECN).
- G. Maintain and exercise Basic Ordering Agreements (BOAs) with response and cleanup contractors. Ensure proper notification of responders and regulatory agencies during an event, including DOE personnel.
- H. Develop protective action and accountability procedures to be taken during events at the SPR. Ensure employees are aware of and familiar with the protective action procedures, including sheltering locations, evacuation routes, and assembly areas.
- I. Ensure the SPR Emergency Management is in a constant state of readiness through a coordinated training, exercise, and drill program. Conduct scheduled and unscheduled tabletops, exercises, and drills as required by DOE and regulatory agencies and SPR plans.
- J. Develop and implement a formal emergency response training for the SPR that includes ERT qualification training, fire suppression, first aid, management officials and specialized emergency duty personnel, and all others with emergency response responsibilities, including SPR and DOE personnel.
- K. Ensure that 100 percent of Incident Commanders/Qualified Individuals are trained in Incident Command System to the appropriate level.
- L. Provide adequate fire protection management to ensure fire prevention and protection systems and equipment are properly and cost effectively inspected, maintained, or operated to provide appropriate levels of protection throughout the SPR. Maintain an adequate staff, including Fire Protection Engineers.

Continuing education and training shall be provided to maintain and enhance the competency of the Fire Protection staff to professional levels. Provide and maintain a review and comment system of all plans and specifications to ensure the SPR is designed and constructed to Improve Risk/Highly Protected Risks (IR/HPR) levels of fire protection. Provide oversight and analysis consequence, probability, failure mode(s), and efficient and effective corrective actions and prioritized for funding of the corrective action(s).

- M. Promptly notify the Assistant Project Manager for Technical Assurance and Director, Security and Emergency Operations of a Fire Protection/ Emergency Management event, deficiencies, problems, corrections, and changes to Fire Protection and Emergency Management systems, equipment, or policy.
- N. Provide cost-effective, timely, and appropriate recommendations on permanently correcting Fire Protection related deficiencies identified in the Action Tracking System.
- O. Conduct Emergency Management/Fire Protection self-assessment of facilities and operations according to the scope and frequency established by DOE and SPRPMO requirements and DOE Order. This shall include appraisals, performance analysis, follow-up, communications, and action tracking.
- P. Prepare and make presentations required by DOE.
- Q. Provide for the timely completion of Emergency Management and Fire Protection assignments as required by directive and the Contractor Requirements Document.
- R. The Contractor shall utilize the Occurrence Reporting Processing and Information Guidance in conformance with DOE and SPRPMO Orders.
- S. Provide adequate Disaster Recovery management to ensure Disaster Recovery plans, procedures, and equipment are in place and available for COOP in case of a major disaster at any SPR facility. Develop training for COOP personnel as identified in the SPR Plans.
- T. Schedule and conduct necessary drills/exercises to ensure plans, equipment, and personnel readiness in case of a COOP event.

II. DELIVERABLES

Deliverables include the following:

<u>Deliverables (E = Electronic via Link to a Document Management System, H = Hardcopy)</u>	<u>Due</u>
1. Submit Exercise After Action Report(s) (E) and (H)	Not later than 45 working days after exercise completion
2. Record Lessons Learned from each PREP Exercise (E)	Not later than 45 calendar days after the After-Action Report is accepted by SEOD
3. Submit Corrective Action Plan for all deficiencies noted in self assessments and outside program review(s) (E)	30 working days after receipt of initial findings
4. Submit Emergency Response Assurance Plan (ERAP) and Exercise Schedule (E) and (H)	October 15 th
5. Provide Final Exercise Drill Package for signature (H)	30 calendar days prior to exercise
6. Conduct Staff Hurricane Awareness Training	May 31 st
7. Submit updated/reviewed M&O contractor Business Continuity Plan (COOP) (E) and (H)	By Milestone Date
8. Provide training to all ERT members	Annual

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Fire Protection/Emergency Management

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
1. Ensure Emergency Response Team (ERT) members are prepared to respond to emergencies at each site.	a. Percentage of (quarterly) trained ERT members at each site.	a. 95 percent of authorized ERT members at each site must be trained and fully qualified	a. 100 percent of authorized ERT members on roster at each site must be trained and fully qualified
	b. Percentage of key spill response equipment categories listed in site’s quarterly spill response equipment readiness inventory is available and functional and operational. (1) Boom Sections, (2) Boats, (3) Motors, (4) Trailers, (5) Response Trailer, (6) Command Trailer, (7) Command Vehicle, (8) Tow Trucks, (9) Confined Space Rescue Equipment.	b. 90 percent of inventory must be available for emergencies	b. 100 percent of inventory must be available for emergencies
	c. Successful completion of Preparedness for Response Exercise Program (PREP) drills/exercises objectives and equipment readiness.	c. N/A	c. 100 percent of PREP objectives tested (prorated)
2. Emergency Management	a. Conduct an annual self-assessment using established Standards and Criteria.	a. N/A	a. 100 percent
	b. Emergency Management Inspection must achieve a Satisfactory and Effective Performance Rating.	b. N/A	b. 100 percent

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Fire Protection/Emergency Management

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		MINIMUM	TARGET
3. M&O Contractor Business Recovery Plan must be current and accurate.	a. Annual review and update.	a. N/A	a. 100 percent
	b. Business Recovery Plan must support the current SPRPMO Continuity of Operations Plan.	b. N/A	b. 100 percent
4. Emergency Plans	Emergency Plans must be reviewed and revised as necessary, annually.	N/A	100 percent
5. Fire Protection Planning	a. Annual review/update to the Fire Protection Manual ASL 5480.18 and associated procedures.	a. N/A	a. 100 percent
	b. Maintain Training Competency Schedule and records on ERT members.	b. N/A	b. 100 percent
	c. Update test procedures and work instructions for maintenance and testing of the fire equipment.	c. N/A	c. 100 percent
	d. Develop and deploy employee awareness training for fire protection (note: may be done with Emergency Management).	d. N/A	d. 100 percent
6. Emergency Event Reporting/Classification	Accurately categorize operational emergencies.	N/A	100 percent

M&O CONTRACTOR FOR STRATEGIC PETROLEUM RESERVE

Work Authorization DirectiveTechnical Support and Management - Internal AuditI. DESCRIPTION OF WORK

The purpose of the Internal Audit function is to comply with the Internal Audit Clause of the contract (Department of Energy Acquisition Regulation 970.5232-3) and related applicability of DOE Orders O 221.2A “Cooperation with the Office of Inspector General;” O 226.1B “Implementation of Department of Energy Oversight Policy;” O 227.1A, Independent Oversight Program, 2340.1C “Coordination of GAO Activities;” O 413.1B “Internal Control Program;” and O 221.1B “Reporting Fraud, Waste, and Abuse to the Office of Inspector General.”

1. The Internal Audit operations must be conducted in a manner satisfactory to DOE, which includes:
 - a. Be organizationally independent, both de facto and in all outward indications.
 - b. Maintain a sufficient staff to provide adequate audit coverage of key operations and related costs.
 - c. Maintain staff of appropriately trained professionals to comply with Institute of Internal Auditors (IIA), Standards for the Professional Practice of Internal Auditing (includes Continuing Professional Education (CPE), focused on specialized training in areas to be covered in Annual Audit Plans, i.e., Information Systems and SAP audits).
 - d. Perform sufficient testing of systems’ “internal controls” (management controls) and substantive testing of financial transactions to ensure that costs are reasonable, allowable, and allocable under the contract, and issue final Incurred Cost audit report by April 15, 2019 unless unforeseen circumstances necessitate an agreed upon extension of the date.

- e. Prepare Fiscal Year (FY) 2020 Annual Audit Plan to provide for adequate coverage of reasonableness, allowability, and allocability of all incurred costs and submit plan by June 17, 2019, for subsequent Head of Contracting Activity (HCA) or designee approval and submission to the Office of Inspector General (OIG). The plan should be based on a risk assessment of auditable areas, incorporate areas of concern identified by DOE/M&O Contractor management and OIG, and include a data sheet for each audit planned.

2. Internal Control Program Reporting

- a. Support M&O Finance's annual and quarterly reporting of Internal Control Evaluations based on the Fiscal Year Guidance from the DOE Office of Chief Financial Officer (CFO) implementing DOE O 413.1B, "Internal Control Program" in compliance with the Federal Managers Financial Integrity Act (FMFIA). Support shall include:
 - (1) Testing and validation associated with the Financial Management Assurance (FMA) Evaluation results as documented in the CFO (M&O's) Excel FMA Tool.
 - (2) Review/identify or concur with any Potential or Immediate Significant Issues identified in the Excel Entity Assessment Tool (EAT).
- b. Preparation and submission of the FY 2019 Annual Assurance Report from the M&O Contractor Project Manager to the DOE Project Manager. This report will consider the following:
 - (1) Status of Management Control and Financial Management Systems. Consider existing information such as:
 - (a) Internal and external reviews, audits, appraisals, and other types of evaluations and any problems that were disclosed.
 - (b) Activity reports and other existing mechanisms for reporting to management and any problems disclosed.
 - (c) Problems identified through ongoing quality initiatives.

- (d) Underlying management principles incorporating GAO standards for Internal Controls.
 - (e) Strategic Plans, Budget, and Customer Needs.
- (2) Summary of audit activity during the fiscal year.
 - (3) Identification of any “Reportable Conditions/Material Weaknesses/ Material Nonconformances,” in accordance with the Office of Chief Financial Officer’s direction for compliance with the reporting requirements of DOE 413.1B, “Internal Control Program.”
 - (4) The FY 2019 Annual Assurance Report must be signed by the M&O Contractor’s Project Manager as of the submission date and submitted to DOE by June 28, 2019.

3. Audit Resolution and Follow-up System

Maintain Audit Resolution and Follow-up System to track Internal Audit and other findings/recommendations.

- a. Timely Resolution of Internal Audit findings/recommendations.
 - (1) Ensure timely closure of above with signed resolution agreement between DOE Audit, DOE Contracting Officer and M&O Contractor.
- b. Timely Resolution of IG, GAO, and DOE Audit findings/recommendations.
 - (1) Ensure timely closures of above with signed resolution agreement between DOE Audit, DOE Contracting Officer and M&O Contractor

4. OIG’s Cooperative Audit Strategy

Adhere to the OIG's Cooperative Audit Strategy which continues to place increased reliance on the Internal Audit Group's audits to help meet its mission objectives.

5. Peer Review

Submit to, at least once every 5 years, a peer review of the Internal Audit function and organizational position, to be conducted by two other non-affiliated M&O contractors' Internal Auditors, and annually participate as team leader or team member for two of the years not under review.

6. Audit Report Review System

Participate in a joint review with DOE PMO Audit Liaison personnel of current DOE-OIG and GAO audit and inspection reports to identify reports with perceived local implications to the SPR. The process includes forwarding the identified reports to applicable M&O Contractor and DOE SPR APMs and managers for their consideration in the management of the SPR. The process is intended to foster sharing of information and discussions among management of the SPR.

7. Updates to SPR-Approved Audit Plan

Document all Special Requests for Audits in an addendum to the SPR-Approved Audit Plan. The addendum will address impacts to planned audits and establish applicable milestone dates.

II. DELIVERABLES

Deliverable (E = Electronic via Link to a Document Due
Management System, H = Hardcopy)

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| 1. Audit reports of Internal Audits performed in accordance with the SPR-approved Annual Audit Plan, developed in accordance with the OIG Cooperative Audit Strategy, or modified with SPR concurrence, (NOTE: The final report relative to incurred costs is due by April 15, 2019.) (E) | April 15, 2019 |
| 2. Audit Planning Package to include Section 1 - FY 2019 Audit Plan with Audit Data Sheets and Section 2 - Risk Assessment by June 17, 2019 (E) | June 17, 2019
June 17, 2020
June 17, 2021 |

III. PERFORMANCE MEASURES

WAD NUMBER: 2019-1.T

PERFORMANCE AREA: Technical Support and Management - Internal Audit

FISCAL YEAR: 2019

CRITERIA	PERFORMANCE MEASURE	FY 2019 OUTPUT	
		TARGET	STRETCH TARGET
1. Conduct suitable Internal Audit Operations under the contract.	Percentage of tasks initiated from the FY 2019 Audit Plan, including audits, special projects, required reporting assignments, and tasks added or substituted as needed.	85 percent	95 percent
2. Maintain Audit Resolution and Follow-up System to track compliance with issues/findings identified through any review or audit conducted by any of the following groups: Inspector General (IG), Government Accountability Office (GAO), FFPO Internal Audit, or DOE Audit	Timely resolution of Internal Audit findings and recommendations as well as timely resolution of IG, GAO, FFPO and DOE Audit findings and recommendations leading to closure with signed resolution agreement between DOE Audit, DOE Contracting Officer and M&O Contractor.	For any audit closed in FY19 (regardless of when it began) with findings for the SPR, the corrective action plan was developed by FFPO and approved by DOE within 60 days	For any audit closed in FY19 (regardless of when it began) with findings for the SPR, the corrective action plan was developed by FFPO and approved by DOE within 30 days