

SECTION C - DESCRIPTION/SPECIFICATIONS

PERFORMANCE WORK STATEMENT

LEXINGTON OVERSIGHT AND TECHNICAL SERVICES

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SECTION C - DESCRIPTION/SPECIFICATIONS

C.1 OBJECTIVE AND BACKGROUND

The mission of the Portsmouth/Paducah Project Office (PPPO) is to effectively implement the Office of Environmental Management (EM) responsibilities, obligations and activities at the Department of Energy (DOE) Portsmouth, Ohio, and Paducah, Kentucky sites in compliance with Departmental policy. PPPO implements EM Headquarters' policy for contract award and administration in the execution of all EM operational, maintenance, and program activities at the sites. This is a task order for Engineering and Operations Technical Services (EOTS), providing engineering and operations technical support services with ancillary administrative support of the PPPO Field Office mission in Lexington, KY and operations of the Depleted Uranium Hexafluoride (DUF₆) Conversion Project located in Paducah KY, and Portsmouth OH. The EOTS shall support PPPO's execution of EM Journey's to Excellence with emphases on improvements in contract and project management with an emphasis on safety, security and quality management systems.

The PPPO works to ensure EM Goals described in the *Office of Environmental Management Performance Agreement with the Assistant Secretary* (Attached in Section J) are supported. The Goals that are pertinent to this PWS are:

Goal 1: Improve safety and quality performance towards a goal of zero accidents, incidents, and defects and continue to improve the EM Complex-Wide Safety Culture.

Goal 3: Improve project, budget, and contract management with the objective of delivering results on time, within cost, and with world-class technical competencies.

Goal 4: Achieve excellence in management and leadership with the objective of making EM an employer of choice in the Federal Government.

In the performance of this task order, the Engineering and Operations Technical Services Contractor shall support and implement actions in furtherance of the "Performance Agreement with the Assistant Secretary" and achievement of the above goals as it relates to the Portsmouth/Paducah Project Office.

C.1.1 DUF₆ BACKGROUND

The mission of the DUF₆ Project is to provide for conversion of DOE's inventory of DUF₆ to a more stable chemical form suitable for beneficial reuse or disposal. The approximately 740,000 metric tons of depleted UF₆ is stored as a solid in about 63,000 large steel cylinders. The scope of the project includes operations and eventual decommissioning of two conversion facilities (one at Paducah, KY and the other at Portsmouth, OH). The Project also provides for the surveillance and maintenance of cylinders at the two sites.

Construction of the DUF₆ Conversion Project was completed in 2008 and after extensive testing the two plants began initial operations in 2010. In December 2010, DOE awarded Babcock & Wilcox Conversion Services, LLC (BWCS) the current contract to operate the DUF₆ Conversion Plants for five years (Contract DE-AC30-11CC40015). The BWCS Contract, herein referred to as the Operations Contract, is valued at \$428M. The Portsmouth, OH DUF₆ inventory is expected to be processed in ~18 years and at Paducah, KY within 25 years.

C.1.1.1 DUF₆ CONVERSION PROCESS

DUF₆ conversion uses a continuous dry conversion process in which DUF₆ is vaporized and converted to uranium oxide (predominantly U₃O₈) in fluidized bed conversion units. The conversion to an oxide is accomplished through the reaction of DUF₆ gas with steam and hydrogen; aqueous Hydrofluoric (HF) acid is produced as a co-product. The process generates no wastewater and only minor gaseous emissions. The resulting uranium oxide powder is collected and packaged for disposition.

The process equipment is arranged in parallel lines, each line consisting of two autoclaves, two conversion units, an HF recovery system, and process off-gas scrubbers. Both facilities utilize the same process and equipment designs and differ only in the plant capacity. The Portsmouth, OH plant has three conversion lines, while the Paducah, KY plant has four conversion lines. The HF recovery system that is part of each conversion line collects the HF produced and processes it into marketable products. In order to sell the HF for commercial use, release limits for any radioactive material that might be in the aqueous HF have been determined and approved. An as-low-as-reasonably-achievable (ALARA) analysis was performed to select appropriate release limits.

The process off-gas scrubbers that are part of each process line remove virtually all remaining HF from the process off-gas through a reaction with potassium hydroxide (KOH) to produce potassium fluoride (KF). The KF then passes into a KOH regeneration system where it reacts with slaked lime [Ca (OH)₂] to regenerate the KOH solution, precipitating calcium fluoride (CaF₂) treated as waste. A cylinder transfer system will be used to transfer the contents of unacceptable cylinders to acceptable cylinders for processing. Heel cylinders are being treated to stabilize remaining material. Empty and heel cylinders that are either 30 inches or 48 inches in diameter are reused as containers to package the uranium oxide resulting from the conversion.

The conversion plant facilities occupy approximately ten acres at each site and are located and arranged to fit optimum logistical considerations, such as material transport and proximity of public access areas. Site upgrades include access roads and rail lines, as needed, to provide transportation to the new facilities. Site structures include a Conversion Building, a Warehouse/Maintenance Building, an Administration Building and a KOH Regeneration Building. The Conversion Building is a precast, pre-stressed concrete structure, while the non-uranium processing buildings are constructed using standard industrial building styles and materials, such as pre-engineered metal buildings.

C.2 CONTRACTOR PERFORMANCE

This PWS describes engineering and operations technical support services for; 1) operations of the Depleted Uranium Hexafluoride Conversion Project with functions required in Lexington, KY, Paducah, KY, and Portsmouth OH; 2) administrative and records management services; and 3) the related technical functional areas tasks required in Lexington, KY, Paducah, KY, and Portsmouth OH . Technical functional areas are as follows:

1. Project And Operation Support To DUF₆
2. Administrative and Records Management Services
3. Information Technology Services
4. Safeguards and Security,
5. Public Affairs and Community Relations,
6. Project Integration and Change Control And Performance Management
7. Nuclear Material Management

8. Nuclear Safety Basis
9. Quality Assurance
10. Environmental Risk Assessment
11. Environment, Safety, And Health Support, and
12. Additional Technical Service

The contractor shall have personnel physically located at the PPPO location (i.e. Lexington, KY, Paducah, KY and Portsmouth OH) where the individual services will be predominately performed. Contractor personnel will be required to routinely and/or periodically travel between PPPO sites located in Paducah, Portsmouth, and Lexington regardless of where their office is physically located.

The contractor shall provide personnel with the expertise necessary to perform the services identified in the PWS and as ordered by the CO. Unless specified otherwise in the task order, the EOTS shall be responsible for the operations, environment, safety, health, and quality control within its own organization. The EOTS shall be responsible for its own project management functions. The EOTS shall provide a monthly report on its activities for that period briefly detailing activities, tasks performed.

C.3 PERFORMANCE REQUIREMENTS

The Contractor shall perform the following tasks to support requirements at the PPPO.

C.3.1 DUF₆ SPECIFIC TASKS

The EOTS shall provide support in two major areas:

- Integrated Project Team (IPT) support; and
- Project technical oversight support to DOE as the operating contractor conducts phased startup of the facilities including Readiness Assessment Review(s), transition to full operations and ultimately, full operations

C.3.1.1 INTEGRATED PROJECT TEAM SUPPORT

The EOTS shall provide services to perform technical support to DOE in the following areas: project integration and analysis; project coordination and document control; document review and comment; and contract management support. In performing these functions, the EOTS shall provide an assessment of compliance with DOE Orders.

C.3.1.1.1 PROJECT INTEGRATION AND ANALYSIS

The EOTS shall support DOE in the integration, analysis, project controls, and reporting of the DUF₆ Project. At a minimum, the EOTS shall perform the following activities:

- Review/analyze/coordinate the Operations Contractor's monthly reports to determine accuracy of data, validity of assumptions, and reasonableness of conclusions;
- Provide assistance on tracking corrective actions related to project costs and schedule reporting;
- Develop, produce, and manage performance fee model and curves, including analysis and recommendations;
- Develop and track other project participants' costs and schedules;

- Integrate the Operations Contractor's reports with other project participants' costs and schedules, develop the Total Project Costs and provide assistance for the resolution of technical issues;
- Develop the Project Summary Report of Total Project Costs with graphic and tabular representation of percent budgeted, performed, and spent during each period by Work Breakdown Structure (WBS) for all project contractors;
- Coordinate and prepare an internal Project Management Summary Report.
- Analyze and report cumulative data for variances;
- Prepare project reports for DOE Headquarters;
- Identify events and/or trends that will impact cost, schedules, and baselines;
- Assist in the monitoring of the Performance Evaluation Management Process as requested;
- Monitor and review the Project's maintenance of the applicable standards through approved processes such as Work Smart Standards (WSS) and Standards Requirements Identification Documents (SRIDs); and
- Other related work as directed

The three areas of reporting of the Operations Contractor that are to be analyzed by the EOTS are:

- General Management;
- Schedule, Labor, and Cost Plans and Reports; and
- Performance Measurement.

The majority of reports will be submitted monthly to DOE as part of the project controls function. Project reports and plans for each site shall be reviewed, validated, and/or summarized.

The EOTS shall perform data analysis, cost estimating, scheduling, project specific administrative support, project specific data entry, and electronic publishing.

C.3.1.1.2 PROJECT COORDINATION AND DOCUMENT MANAGEMENT

The EOTS shall assist in coordination and control of the DUF₆ Project documents utilizing relevant document management experience and technical knowledge of uranium processing, the nuclear fuel cycle and technologies, and the DOE protocols and procedures for management of a large, complex operations project. The EOTS shall perform two major functions: project coordination of documents and document management.

C.3.1.1.2.1 PROJECT COORDINATION

The EOTS shall provide overall project coordination of documents prepared and/or reviewed and commented by various project participants, including design documents and other Operations contract deliverables, for review, acceptance, or approval by the DOE IPT.

Overall project coordination functions include the following activities:

- Monitor document status and ensure schedules are met;
- Report status to DOE managers;
- Track the Operations Contractor's deliverables listed in the project contract;
- Assist in the document and design review flow;
- Ensure deliverables are distributed and reviewed in support of approved DOE schedules;
- Assist in consolidating/reconciling all participants' comments on deliverables;
- Assist in preparation and presentation of data to meet periodic requirements;
- Assist in updates of the DOE WBS Index and Dictionary;
- Assist in the process of compiling and maintaining the most current Work Smart Standards sets, policies, and procedures;
- Assist in the development of Master Schedules and the review of EOTS-generated detail schedules for compliance with established DOE baselines;
- Support External/Internal Reviews as required;
- Maintain a schedule for IPT reviews;
- Support the IPT;
- Arrange for and participate in teleconferences and meetings for DOE and its EOTS;
- Host project meetings;
- Provide project document delivery services;
- Maintain action item lists (derivation and tracking to completion);
- Maintain separation of expense for all project participants; and
- Other related work as directed.

C.3.1.1.2.2 PROJECT DOCUMENT REVIEW AND COMMENT

The EOTS shall review and comment on the following project documents to assure compliance with DOE guidelines and procedures as required so that the Operations Contractor can produce an acceptable final document:

- Project Management Plan;
- Integrated Safety Management System Plan;
- Preliminary and Final Documented Safety Analyses;
- Waste Management Plan;
- Site Security Plan;
- Transportation Plan;
- Cylinder Surveillance & Maintenance Plan;

- Conversion Facilities Operations and Maintenance Plan;
- Records Management Plan;
- Regulatory and Permitting Management Plan;
- Quality Assurance Management Plan;
- Conversion Project Management Plan;
- Worker Safety and Health Program; and
- Radiation Protection Plan

C.3.1.1.3 CONTRACT MANAGEMENT SUPPORT

The EOTS shall provide support for the project including, but not limited to: performing contract-related research and draft findings in correspondence and/or white papers; assisting in the preparation of contract modifications and required support; and tracking contract-related issues.

The EOTS shall perform oversight of contract closeout activities in support of closure of the BWCS Contract (DE-AC30-11CC40015).

C.3.1.2 DUF₆ OPERATIONS OVERSIGHT SUPPORT

C.3.1.2.1 COMPREHENSIVE TECHNICAL SUPPORT FOR OPERATIONS

The EOTS shall support DOE in technical and project management efforts to assure successful DUF₆ Project plant operations. A minimum of two full-time equivalent oversight staff shall be available at each of the PPPO sites (Portsmouth, OH and Paducah, KY) to support the DOE Federal Project Director (FPD) as directed.

The EOTS's support shall include oversight, issue identification, solution identification and value-added technical contributions. The EOTS shall provide tracking and validation for the DOE FPD of successful implementation of these value-added technical contributions.

The EOTS's actions and responsibilities shall include leadership of efforts to support DOE in the improvement of the identified status of oversight and readiness support, and the readiness efforts going forward.

The EOTS shall provide technical services to review, validate and assess plant systems functionality, operability, reliability, maintainability, inspectability, procedures and associated documentation, staffing plans and training, maintenance planning and implementation, as well as Environmental, Safety and Health (ES&H) and waste management. Activities include, but are not limited to:

- Familiarization with plant test and startup requirements;
- Validation of Test Plans;
- Assessment of Operations Contractor's organization and qualifications;
- Review of test and operations procedures;
- Tracking of test completion and certification;
- Assessment of test record documentation and recordkeeping;

- Assessment of training plan and procedures;
- Evaluate training effectiveness;
- Evaluate staffing plans;
- Assessment of training record keeping; and
- Evaluate and report on performance metrics related to plant operating status

The EOTS shall work directly with the Operations Contractor to ensure that the Operations Contract is implemented pursuant to the Project Reporting Requirements and other project requirements identified in Operations Contract.

C.3.1.2.2 SPECIALIZED TECHNICAL SERVICES

The EOTS shall support DOE's efforts in the management of the Operations Contract. Examples of specific tasks are as follows:

- Provide technical support to define the requirements for operations activities of the DUF₆ Project Facilities;
- Evaluate proposed management systems for operations of the DUF₆ Project Facilities;
- Assist in the evaluation of likely costs for various activities for transition to operations and operation of the DUF₆ Project Facilities;
- Assist in the development of other performance requirements relating to DUF₆ Operations;
- Provide support for evaluation of an activity based cost estimate for DUF₆ Project Operations; and
- Research, review and draft plans and specifications in relation to DUF₆ Project Operations.

C.3.1.2 DELIVERABLES

The EOTS shall submit its monthly labor management and cost management reports. Other deliverables required under this task order shall be submitted according to a schedule submitted by the EOTS and as approved by the CO.

C.3.1.3 TRAVEL

Travel will be required and shall be conducted as needed to the places of performance or other locations as needed to support the work. Travel will be in accordance with FTR and only with annual approval of a travel budget plan by the CO. Additions outside of the approved plan will be done by the CO individually.

C.3.2 ADMINISTRATIVE AND RECORDS MANAGEMENT SERVICES

C.3.2.1 ADMINISTRATIVE SERVICES

The EOTS shall provide administrative support including clerical and program analyst duties to all PPPO staff at the Lexington, KY location. Support is expected to be provided by temporary or other personnel when regularly assigned EOTS personnel are unavailable. The EOTS shall cover duties when the DOE administrative staff is unavailable. Duties will include, but may not be limited to:

General administrative support:

- telephone reception;

- typing and preparation of documents in a variety of word processing, presentation and/or spreadsheet software;
- proofreading, editing, and copying;
- making travel reservations, preparing travel documents in the Government's electronic travel system (Gov Trip), travel authorization and voucher tracking;
- provide assistance with data entry into the Strategic Integrated Procurement Enterprise System (STRIPES) for purchase card services;
- maintain schedules for conference rooms and spare offices;
- visitor control: ensure visitors fill out visitors log information, obtain a visitor's pass, and provide security escort assistance;
- assist DOE Program Support Specialist(s) with the ordering and maintenance of adequate office supplies including mail and packaging supplies;
- preparation and distribution of daily attendance report to the PPPO Federal employees mail:
 - processing incoming and outgoing correspondence and mail,
 - electronic distribution to staff and management;
 - filing;
 - scanning into the LiveLink Document System (an electronic document management system);
 - preparing actions in LiveLink and closing as appropriate;
 - processing outgoing documents properly (including overnight mail and express packages) and in accordance with the PPPO Correspondence Procedures.

Records Management and document control activities to include organizing, managing, and maintaining documents (including a master filing system); mail distribution; performing record searches by physical or electronic means and assisting DOE in responding to discovery requests; FOIA requests; and similar requests including compilation and reproduction of documents.

Meeting and logistics support for various types of meetings (including public and regulator meetings) regarding program and projects under oversight of the PPPO including making arrangements and taking meeting minutes.

The EOTS shall be responsible for tracking, arranging schedules, routine maintenance and upkeep of the GSA-Leased vehicles located in Lexington, KY. In addition, the EOTS shall be responsible for the administrative activities for the Government-owned vehicles such as tracking odometer readings, signing in and out, and other similar activities.

The EOTS shall provide comprehensive document production support, graphics development, reproduction and printing services, website creation, and technical writing and editing as required to support PPPO. These services include, but are not limited to, the production and distribution of technical papers, pamphlets, brochures, reports, presentation materials, and other written and graphic documents.

C.3.2.2 DOCUMENT CONTROL AND RECORDS MANAGEMENT

EOTS shall implement and maintain sound document control functions to ensure the efficient coordination, control, tracking, retrieval, distribution and filing of documents to include, but is not limited to the following major documents:

- System Requirements Documents;

- Independent Reviews;
- Project Reports; and
- Various Operation Contractor deliverables

Document control activities also include the processing (handling, receipt, filing and distribution) of incoming and outgoing project documents and developing and maintaining project procedures, guides and other relevant documents.

The EOTS shall perform records management functions in accordance with all applicable Federal laws, DOE requirements and the PPPO Records Management Program for all records generated/received in performance of this task order.

The EOTS shall provide records management support to the PPPO staff at the Lexington, KY location to include, but is not limited to, tasks associated with creating, receiving, inventorying, scanning, filing, maintaining, storing, preserving, protecting, scheduling, indexing, and dispositioning active and inactive records (regardless of media); further promoting and developing the PPPO Records Management Program, as needed; managing classified records (if applicable), managing vital records and other specialty records, managing electronic records (including e-mail records), retrieving records from on- and off-site storage facilities, and supporting requests related to the Freedom of Information Act (FOIA), the Privacy Act (PA), the Energy Employee Occupational Illness Compensation Program (EEOICPA), the former worker medical screening program, the chronic beryllium disease prevention program, congressional inquiries, and legal discoveries.

The EOTS shall support the development and implementation of records management controls for PPPO to ensure that the identification, maintenance, and disposition of electronic records (including e-mail) are managed through the use of records management applications, in accordance with Federal, DOE and PPPO requirements and guidelines. Additionally, the EOTS shall incorporate controls into electronic information systems or integrate them into a recordkeeping system that is external to the information system itself, in accordance with 36 CFR 1236.

C.3.3 INFORMATION TECHNOLOGY SERVICES

C.3.3.1 INFORMATION TECHNOLOGY (IT) AND TELECOMMUNICATION INFRASTRUCTURE

The EOTS shall provide IT services as required to support the PPPO mission including but not limited to the following sections:

C.3.3.1.1 PROJECT MANAGEMENT AND IT COORDINATION

The EOTS shall be responsible for carrying out all projects and tasks related to IT in line with the PPPO IT strategic plan. The EOTS shall maintain the IT Project Plan and coordinate all IT tasks in accordance with the strategic plan and technology needs of the PPPO IT infrastructure and IT support services. The EOTS shall provide, monthly, a status report of its progress against the IT Project Plan.

C.3.3.1.2 HELPDESK SERVICES

The EOTS shall be responsible for ensuring availability of Helpdesk services for the PPPO user base centralized in Lexington, KY. Helpdesk services shall be available from 7:30 a.m.

– 6:00 p.m. EST Monday–Friday, except holidays and other days on which Federal facilities are closed. Email and voicemail shall be available to the user base to request assistance and/or report a problem. Help Desk Analysts are technical specialists whose primary function is to ensure that workstation and network problems encountered by Federal and contractor personnel at PPPO are resolved as promptly and completely as possible. High priority tickets shall be responded to within one hour, medium priority tickets within three hours, and low priority tickets within five hours. Helpdesk services include but are not limited to the following activities:

- Desktop and local printing setup;
- Office-specific help desk and site support;
- Site-specific troubleshooting for hardware and software; and
- Additional hardware requirements for new equipment

C.3.3.1.3 END USER SITE SUPPORT

The EOTS shall be responsible for establishing, engineering, implementing maintaining the desktop infrastructure and providing desktop service for problem resolution for PPPO federal and contracted support personnel at all three sites. In order to ensure that PPPO personnel experience minimal computer down time, the EOTS shall maintain an End User Support Specialist at the Lexington site during regular business hours (7:30 a.m.-6:00 p.m. Eastern Time) Monday-Friday, excluding Federal holidays. Evening and weekend coverage, on-site or on-call, shall be made available. An IT Specialist shall be provided at each of the Portsmouth, OH and Paducah, KY sites using the industry standard end-user to support person ratio.

The EOTS shall provide desk-side assistance to resolve hardware and software problems referred to End User Support by Help Desk Analysts;

- install new hardware and software at user's desktop;
- maintain Government hardware in good working order;
- document inventory changes;
- maintain the upkeep of storage areas; and
- develop and implement the PPPO Cyber Security Program Plan.

The EOTS shall be responsible for maintaining a minimum of four spare computers at each site, one network-capable printer, and four stand-alone printers available at all sites.

C.3.3.1.4 NETWORK OPERATIONS AND SYSTEMS SUPPORT

The EOTS shall be responsible for establishing, implementing and operating the PPPO network, including:

- Acquisition, installation, configuration and testing of all necessary hardware and software;
- Maintaining file servers, Exchange/Outlook electronic mail post offices and any message transport agent, remote access capabilities, security on servers, network and server resource monitoring, proactive maintenance and data backups;
- Establishing and maintaining email configuration and connectivity, and troubleshooting email-related problems;

- Optimizing the performance, reliability and availability of the PPPO network infrastructure and shared resources, including:
 - Server tuning;
 - Maintaining backup equipment;
 - Risk analysis and disaster recovery planning;
 - Evaluation and implementation or coordination of cable and network equipment upgrades;
 - Maintaining user accounts on the network including:
 - Creation of new user login ID's and file directories;
 - Disabling user accounts as users leave or are reassigned;
 - Deleting user accounts as requested or as users leave or are reassigned;
 - Mapping users to appropriate shared directories and files and ensuring rights are administered at the correct level
 - Ensuring appropriate user access to network-based applications, network printers, and print queues;
 - Administration of shared resources, i.e., Microsoft Exchange, Citrix, shared directories, virus protection, security implementation, website support, etc.,
 - Network security planning and implementation (remote users, access audits, firewalls, physical access controls;
 - Providing prompt and timely notification of network or server outages of any type.

C.3.3.1.5 SOFTWARE/APPLICATION DEVELOPMENT AND SUPPORT

The EOTS shall be responsible for developing, testing, implementing and supporting any Commercial Off the Shelf (COTS), Government or contractor developed software/application on the PPPO network, including:

- Acquisition, installation, configuration and testing of all necessary Database platforms; Optimizing the performance, reliability and availability of the PPPO Infrastructure Databases, including:
 - server tuning;
 - maintaining backups;
 - updates;
 - training; and
 - user support.
- Administration of software and applications, including user setup, account creation, account maintenance and license tracking.
- Administration and maintenance of LiveLink record and action tracking application for all three locations.

C.3.3.1.6 DATABASE ADMINISTRATION

The EOTS shall be responsible for planning, testing, implementing and supporting any Database on the PPPO network, including:

- Acquisition, installation, configuration and testing of all necessary Database platforms; and
- Optimizing the performance, reliability and availability of the PPPO Infrastructure Databases, including:
 - server tuning;
 - maintaining backups;
 - updates;
 - training; and
 - user support.

C.3.3.1.7 HARDWARE AND SOFTWARE COMPATIBILITY TESTING

The EOTS shall be responsible for carrying out compatibility testing on all software (including COTS and government or contractor-developed), computers, and peripherals planned for deployment on the PPPO IT infrastructure. There shall be two types of testing: platform and application. This testing shall be conducted in a test environment apart from, and configured to mimic, the live or production environment. The testing shall include startup, login, network connectivity, printing, and close down. No software shall be deployed until testing is completed. The EOTS shall provide all network compatibility testing information to the PPPO, including the Network Compatibility Testing Checklist and the Notification of Test Results forms. If the software fails the testing, the EOTS, the source of the application (e.g., internal group, external group, or commercial vendor), and the PPPO shall devise a mitigation plan. The EOTS shall not deploy any software without the written approval of the FPD.

C.3.3.1.8 ASSET MANAGEMENT

The EOTS shall track the location and movement of all hardware and software owned by PPPO using the internal PPPO inventory system. This service shall be provided in accordance with DOE Order 580.1, Department of Energy Personal Property Management Program. Activities shall include:

- Logging hardware and software into inventory as it is delivered;
 - Ensuring that the hardware is stored properly;
 - Distributing hardware as directed and approved by the Federal Task Monitor;
 - Tracking the hardware as it is moved from one location to another;
 - Ensuring that obsolete hardware is removed from the inventory as directed;
 - Regularly verifying that inventory records are complete and accurate;
 - Accessing inventory at the direction of the Subtask Monitor or Federal designate;
 - Conducting an annual physical inventory of equipment;
 - Assisting the Subtask Monitor or Federal designate in analyzing and researching asset discrepancies, reviewing or researching items on the Gains & Loss report, and preparing reports as needed; and
 - Preparing inventory exit packages within two days from receipt of direction from the Subtask Monitor or Federal designate.

C.3.3.1.9 CYBER SECURITY SUPPORT

- The EOTS shall provide cyber security support for unclassified systems (hardware and software) and classified systems (hardware and software). This service includes activities for a Q cleared Information System Security Officer (ISSO) role, to ensure compliance in the implementation and operations of all DOE cyber security requirements, in classified and unclassified computing. The responsibilities of the ISSO/cyber security role include: Boundary Certification and Oversight;
- Defining, Documenting, and Maintaining PPPO Boundary Cyber Security Policies; and
- Plan of Action and Milestone (POA&M) Response and Resolution

The scope of this activity includes the unclassified systems:

- Cyber security support for unclassified systems to include hardware (workstations, servers, communications equipment, etc.) and software (COTS and custom developed). Such support includes compliance with all federal laws (including The Federal Information Systems Management Act (FISMA)), regulations, OMB requirements, and DOE Orders and guidance on cyber security, Technical Management Requirements (TMRs) and the EM Program Cyber Security Plan (PCSP);
- Processing Certification and Accreditation (C&A) requests for unclassified systems, monitoring and recommending actions necessary to support the DOE unclassified Cyber Security Program, and ensuring that hardware and software installations are compliant with applicable DOE security regulations;
- Maintaining 100% unclassified system availability is a key performance measure objective; and
- Completion of the PPPO Boundary Certification & Accreditations.

And the classified systems:

- Cyber security support for classified systems to include hardware (workstations, servers, communications equipment, etc.) and software (COTS and custom developed). Such support includes compliance with all federal laws (including FISMA), regulations, OMB requirements, and DOE Orders and guidance on cyber security, Technical Management Requirements (TMRs) and the EM Program Cyber Security Plan (PCSP);
- Processing C&A requests for classified systems, monitoring and recommending actions necessary to support the DOE classified Cyber Security Program, and ensuring that hardware and software installations are compliant with applicable DOE security regulations.
- Maintaining 100% classified system availability is a key performance measure objective.
- Completion of the PPPO Boundary Certification & Accreditations.

The EOTS general cyber security activities include:

- Preparation of information security plans as required by Federal law and DOE orders and directives;
- Responding to security events and working with other DOE elements to ensure proper response and appropriate reporting of events;
- Conduct an annual Cyber Security self-assessment and provide a report on the action;
- Technical support of certification and accreditation of PPPO IT systems in accordance with NIST guidance, and including system testing and evaluation using Center for Internet Security (CIS) Benchmarks;

- Providing support for the development of PPPO cyber security policy and guidance including the development and/or review of policy/procedure documents and guides, support for cyber security training and system owner assistance, and conducting technical verification activities under the guidance of PPPO federal staff;
- Development and maintenance of business continuity planning;
- Providing timely, accurate cyber security support and expertise to assist in ensuring effective cyber security protection and PPPO compliance with all Federal laws, regulations, and DOE guidance on cyber security;
- Providing weekly status reports on the outstanding actions, test reports, white papers, technical advice in written and oral form, C&A documentation, and other cyber security documentation as required;
- Providing technical recommendations to the PPPO and oversight of POA&Ms for projects within the boundary, as well as coordination to ensure corrective actions items are addressed and resolved;
- Assuming the primary technical lead in development of the C&A process for PPPO mission-specific systems;
- Developing, reviewing and advising on PPPO-wide cyber security documentation quality and performance measures;
- Meeting weekly with PPPO IT Oversight and task monitor on PPPO cyber security program status, including recommendations on responding to new Departmental and NIST requirements/guidelines; and

Providing support for future classified systems, as required.

C.3.3.1.10 TECHNOLOGY SOFTWARE, HARDWARE PROCUREMENT

The EOTS shall procure IT related equipment, software, tools and miscellaneous items as needed for PPPO. This procurement support is limited to purchases below \$25,000 that are an immediate requirement for PPPO and must be approved by the CO after proper technical review. Other purchases may be authorized above this limit by the CO, if warranted. All purchases will follow applicable task order requirements and federal regulations in regards to purchasing.

C.3.3.1.11 PROFESSIONAL SERVICES PROCUREMENT

The EOTS shall procure IT related professional and consulting services support for equipment, software, and tools deployed in the PPPO IT infrastructure. All purchases will follow applicable task order requirements and federal regulations in regards to purchasing.

C.3.4 SAFEGUARDS AND SECURITY

C.3.4.1 SERVICE DELIVERY

The EOTS shall support DOE in technical and project security efforts to assure successful and compliant security programs at the Lexington Office and at both Portsmouth and Paducah Oversight staff members shall be available at each of the PPPO sites (Lexington, KY, Portsmouth, OH and Paducah, KY) to support the DOE PPPO Security Manager -. Additional SME's for special projects may be required on an as needed basis.

C.3.4.2 PROJECT MANAGEMENT AND SECURITY COORDINATION

The EOTS shall be responsible for carrying out all projects and tasks related to security consistent with PPPO's security mission. This includes providing oversight and administering requirements/guidance of the Safeguards and Security Program within the PPPO Lexington Facility and the DOE oversight of implementation of security measures and programs for the prime site contractors at both Portsmouth, OH and Paducah, KY.

The EOTS shall provide expert and working knowledge Security Subject Matter Expert(s) (SME(s)) in support of the PPPO security programs. Support requires knowledge in Nuclear Materials Control and Accountability (NMC&A), Uranium Inventory Management, DUF₆ Conversion Project, Uranium Fuel Cycle Operations, Site Security Plan (SSP) development, gaseous diffusion operations, safeguards and security management, security project plans, Protective Force Operations, Classification, security self-assessments, Incidents of Security Concern, security deviations or equivalencies, HSPD -12, Operations Security, Personnel Security, Physical Security, Information Security and Classified Cyber Security requirements.

C.3.4.3 LEXINGTON SECURITY SUPPORT

The EOTS shall be primarily responsible for ensuring the availability of support for the PPPO Lexington facility security program. The EOTS shall be responsible for assisting the PPPO Security Manager as the EOTS point of contact for all related activities. Security support includes but is not limited to the following activities:

HSPD 12 program implementation and maintenance;

Development and maintenance of PPPO Site Security Plan(s), PPPO OPSEC plan, PPPO security management plan and PPPO security training plan;

- Development and maintenance of PPPO Security procedures and awareness program;
- Maintain a compliant level of security requirements for a PPPO Lexington Limited Security Area and its associated transmittal equipment;
- Conduct self-assessments, corrective action plans and prepare the comprehensive self-assessment for submittal to the Cognizant Security Office;
- Development and maintenance of the PPPO Security computer based training system;
- Provide classification and unclassified controlled information support to PPPO;
- Development of a consolidated Security strategy in support of the Decontamination & Decommissioning (D&D)/Deactivation/Remediation mission for PPPO;
- Provide overarching security SME cognizance guidance to the PPPO Lexington (e.g. Manager, Deputy Manager, DUF₆ FPD and other PPPO Federal Staff) for instance,
 - Support to the PPPO Human Resource officer to facilitate federal access authorizations and badging with the PPPO Cognizant Security Authority;
 - Support to the PPPO legal staff on security matters;
 - Support to the Public Affairs/Community Relations staff by the timely review of DOE approved information to be publicly released or posted, to ensure no sensitive information is inadvertently released;

- Coordinates and implements security programs, in conjunction with the PPPO IT and Security Managers on overlapping programs like classified cyber, controlled articles, lock and key program, Incidents of Security concern, HSPD-12 implementation and management;
- Coordinate the evaluation of draft and newly issued DOE directives on Safeguards and Security for site specific impacts to the PPPO mission;
- Provide security trending analysis on Incidents of Security Concerns for all PPPO sites;
- Plan and participate in PPPO IPTs; and
- Provide support to respond to Security and Safeguards Data call requests from HQ.

C.3.4.4 PADUCAH KENTUCKY SECURITY SUPPORT

The EOTS shall be responsible for assisting the PPPO Security Manager as the EOTS point of contact for all Security and NMC&A related activities at the Paducah site. Safeguards and Security support at Paducah includes but is not limited to the following activities:

- Review, comment and consolidate comments within 15 Days of receipt to PPPO on prime contractors' site security plans, project security plans, training plans, corrective action plans, management plans NMC&A plans and Protective Force Operations;
- Assist with weapon authorization card qualifications as required;
- Interfaces with the PPPO Cognizant Security Office at Oak Ridge regarding evaluation and resolution of Paducah safeguards and security issues;
- Facilitates/participates in Safeguards and Security and Protective Force surveys and program reviews;
- Performs limited scope reviews of the site safeguards and security programs, to include limited surveys with federal personnel;
- Develop Safeguards and Security briefing materials in support of PPPO and EM HQ managers;
- Provide security SME guidance to the PPPO Site Lead, Deputy DUF₆ Conversion FPD and other DOE Federal Staff;
- Evaluate draft and newly issued DOE directives on Safeguards and Security for site specific impacts on the PPPO mission;
- Develop and prepare site specific security guidance documents, as needed;
- Assists in the development of formal responses to EM HQ, Health Safety and Security (HSS), Office of Inspector General (OIG) and ORO/CSA queries regarding PPPO Paducah safeguards and security issues;
- Coordinates and implements in conjunction with the IT and Security Managers, to include prime Paducah site contractors on overlapping programs like classified cyber, controlled articles, incidents of security concern, and HSPD-12 implementation maintenance.

- Support the security trending analysis on Incidents of Security Concerns; and Plan and participate in PPPO IPTs.

C.3.4.5 PORTSMOUTH OHIO SECURITY SUPPORT

The EOTS shall be responsible for assisting the PPPO Security Manager as the ETS point of contact for all Security and NMC&A related activities at the Portsmouth site. Safeguards and Security support at Portsmouth includes, but is not limited to, the following activities:

- Review, comment and consolidate comments within 15 Days of receipt to PPPO on prime contractors' site security plans, project security plans, training plans, corrective action plans, NMC&A management plans and Protective Force Operations;
- Assist with weapon authorization card qualifications as required;
- Interfaces with the PPPO Cognizant Security Office at Oak Ridge regarding evaluation and resolution of Portsmouth safeguards and security issues;
- Facilitates/participates in Safeguards and Security and Protective Force surveys and program reviews;
- Performs limited scope reviews of the site safeguards and security programs, to include limited surveys with federal personnel;
- Develop Safeguards and Security briefing materials in support of PPPO and EM HQ managers;
- Provide security SME guidance to the PPPO Site Director, Site Lead, Deputy DUF₆ Conversion FPD and other DOE Federal Staff;
- Evaluate draft and newly issued DOE directives on Safeguards and Security for site specific impacts on the PPPO mission;
- Develop and prepare site specific security guidance documents, as needed;
- Assists in the development of formal responses to EM HQ, Health Safety and Security (HSS), Office of Inspector General (OIG) and ORO/CSA queries regarding PPPO Paducah safeguards and security issues;
- Coordinates and implements in conjunction with the IT and Security Managers, to include prime Paducah site contractors on overlapping programs like classified cyber, controlled articles, incidents of security concern, and HSPD-12 implementation maintenance.
- Support the security trending analysis on Incidents of Security Concerns; and
- Plan and participate in PPPO IPTs.

C.3.5 PUBLIC AFFAIRS/COMMUNITY RELATIONS

The EOTS shall be responsible for coordinating the overall public affairs function for PPPO, including supporting DOE in interfacing with the community and other stakeholders, and shall coordinate with other PPPO contractors. The EOTS shall obtain any required classification/public release review prior to any release of information and no information is to be released without DOE approval.

The EOTS shall be responsible for updating the public participation plans as necessary, writing articles for inclusion in newsletters or postings on the PPPO website, coordinating capture of images of PPPO Project activities, preparing fact sheets and press releases, maintaining and updating the PPPO website.

The EOTS shall support DOE in preparing for public/stakeholder meetings.

C.3.6 PROJECT INTEGRATION AND CHANGE CONTROL AND PERFORMANCE MANAGEMENT

The EOTS shall provide support to PPPO Project Management organization to process, integrate, track, analyze, and report data for the roll up of all PPPO projects in the following areas: project management, project control, life cycle planning, performance measurement, budget formulation and execution, and financial management. The EOTS shall coordinate with the PPPO projects, as necessary, in order to consolidate data for all project activities and contracts in accordance with DOE requirements and evaluate and reconcile the data to ensure quality and accuracy of deliverables.

The EOTS shall track and report total PPPO obligations and costs by individual funding source, and provide support to DOE to ensure that obligations and costs do not exceed available funding levels.

At the direction of PPPO, the EOTS shall participate in meetings, conference calls, conferences, and other similar forums relating to overall PPPO Project Integration responsibilities and shall be available to respond to informal DOE requests for information related to Integrated Project Management.

The EOTS shall provide consolidated for all PPPO project data to PPPO in the form of reports, briefing materials, planning and budgeting submittals, data calls, and ad hoc requests.

The EOTS shall be responsible for supporting the overarching PPPO Change Control Administration in accordance with the requirements of DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, for changes to capital project baselines and applicable task order requirements for operations activities. Change Control shall be managed to ensure that changes are identified, evaluated, coordinated, controlled, reviewed, approved/disapproved, and documented in a manner that meets all DOE requirements.

C.3.7 NUCLEAR MATERIAL MANAGEMENT

The contractor shall perform services in support of PPPO (Lexington, Portsmouth and Paducah sites) including technical analyses, expert advice, and short turn-around assignments for special projects and/or unique applications. This includes providing SMEs to support PPPO, as needed, in areas of safeguards and security, nuclear safety, excess uranium inventory history, uranium inventory management, characterization, processing, storage, packaging and transportation, value estimation and trending, marketing, and disposition. Services to be provided include:

- Provide direct support to PPPO Lexington operations, as needed, to meet programmatic goals and objectives.

- Provide special project coordination and support for activities such as International Atomic Energy Agency (IAEA) initiatives, securing He3 tubes and portable Criticality Accident Alarm System (CAAS) units from other sites, transfer of autoclaves to support other program offices, and SME support for Paducah work-for-others historical activities.
- Support independent assessments of the PPPO's NMC&A Program, provided by others, and the application of NMC&A practices per DOE requirements.
- Provide independent assessment of Physical Security and Safeguards and Security programs to assess compliance with DOE requirements.
- Development of the annual Nuclear Materials Customer Forecast and Nuclear Materials Management Plan;
- Provide SME support for PPPO excess uranium inventory management, including the following specific tasks:
 - Evaluate and support development of PPPO policy regarding management of DOE uranium inventories;
 - Provide direct support to PPPO management in planning for the disposition of uranium inventories, including activities such as updating the PPPO inventory data included in the DOE Excess Uranium Inventory Management Plan and maintaining oversight of ongoing activities and plans to ensure consistency with DOE plans and policies.
 - Establish and maintain current and accurate data relative to PPPO uranium inventories at Paducah and Portsmouth. This data should include location, quantities, count of containers/cylinders, characteristics, disposition path, marketability, potential shipping and transfer issues, and estimated market value. Data will be developed proactively and maintained in the form of tables, graphs, and schedules. Data will be provided, as appropriate, in briefings and meetings with PPPO management, and maintained for ready reference in responding to PPPO management needs for up-to-date information. Document and maintain information regarding of the uranium processing history from which the PPPO excess uranium inventories are a legacy. This historical documentation will provide information essential for the identification and understanding of the characteristics of the uranium now in the PPPO inventory. Maintain a history of uranium, uranium conversion, and separative work unit market prices and optimum tails for enrichment.
 - Provide technical expertise and support to assist PPPO in the planning and evaluation associated with disposition alternatives for the higher-value DUF₆ inventories at Paducah and Portsmouth.
 - Evaluate and support the development of PPPO procurement/marketing initiatives regarding the PPPO uranium inventory;

C.3.8 NUCLEAR SAFETY BASIS

The EOTS shall provide overarching support in the area of nuclear safety basis technical area including but not limited to:

- Assistance with safety basis related assessment activities, such as annual USQ assessments;
- Development of PPPO safety basis training and procedures;
- Safety basis review and/or independent review of PPPO SER as needed

- Assistance to PPPO in addressing any emerging nuclear safety issues, initiatives, or external assessments
- Regulatory transition from NRC to DOE for balance of plant (BOP) facilities
- Development of Safety Basis documents such as NSCE and NSCR
- Development and implementation of PPPO NDA measurement requirements to include oversight

C.3.9 QUALITY ASSURANCE

The EOTS shall maintain a Quality Assurance Program (QAP) for the PPPO in accordance with DOE Order 414.1D, *Quality Assurance*, EM QAP, Nuclear Quality Assurance (NQA-1), and DOE Order 226.1A, *Implementation of Department of Energy Oversight Policy*. The EOTS shall be responsible for continuously pursuing enhancements to quality, safety, and reliability.

The EOTS shall maintain a written PPPO QAP based on DOE Order 414.1D, *Quality Assurance*, EM QAP, NQA-1 and DOE Order 226.1, *Implementation of Department of Energy Oversight Policy* and shall submit it to PPPO for review and approval annually.

The EOTS shall support PPPO by performing QA Independent Assessments and Surveillances of PPPO Project activities in accordance with the assessment schedule or as needed, and shall prepare and distribute “lessons learned” reports to encourage improvements based on experience.

The EOTS shall develop and maintain a database to record non-conformances, issues or deficiencies, corrective actions and corrective action closure and verification.

C.3.10 ENVIRONMENTAL RISK ASSESSMENT

The EOTS shall provide senior-level risk assessment support to DOE/PPPO to perform technical analysis and reviews of risk documents at the Lexington and Paducah sites. Technical support will require periodic travel to Nashville, Tennessee; Lexington, Kentucky; and Paducah, Kentucky, for coordination and technical meetings.

The EOTS shall be responsible to review and comment on a variety of documents, figures, tables, and modeling results and provide QA/QC on risk-based information (including, but not limited to: detection limits, background data, action- and no-action levels, preliminary remediation goals, remediation goals, remedial action objectives, screening levels, and human health and ecological risk & hazard calculations, calculation packages); then reviewing the revisions versus the comment response summary packages.

The EOTS is required to participate in technical meetings including Risk Assessment Working Group Meetings, groundwater modeling meetings, WAC development meetings and comment resolution (decision making) meetings with the federal and state environmental regulators.

C.3.11 ENVIRONMENT, SAFETY, AND HEALTH SUPPORT

The EOTS shall provide overall programmatic Environment, Safety, and Health (ES&H) support to PPPO for the development and implementation of the Federal Employees Occupational Safety and Health.

C.3.12 ADDITIONAL TECHNICAL ASSISTANCE

At the CO’s direction, the EOTS shall perform additional technical services which are related to the mission of the PPPO and within the general scope of this task order.

C.4 SECURITY CLEARANCE REQUIREMENTS

All Contractors shall be required to have the ability to obtain an access authorization (e.g., L or Q security clearance).

Labor Classification	Security Clearance Post Award
Database Administrator/Developer	Q
System Administrator	Q
Cyber Security Specialist	Q
System Administrator / IT Project Manager	Q
Network Administrator	Q
Safeguards/Security Specialist	Q
Nuclear Material Inventory & Accountability Specialist	Q
Nuclear Safety Engineer	Q

C.5 REPORTING REQUIREMENTS

The Contractor shall provide reports and other requirements in accordance with Section J, Attachments 3.