

GENERAL INFORMATION

Scope of Work – General

Under this PBMC, the Contractor shall furnish the necessary personnel, facilities, equipment, materials, supplies, and services (except those provided by the Government) to accomplish the Scope of Work. The Scope of Work under this PBMC is comprehensive in that the Contractor shall perform all necessary technical, operational and management functions to manage and operate SRS and perform the missions assigned to the Site. This encompasses all on-going SRS missions and activities as described herein as well as any new activities or missions that may be assigned during the term of the contract. This PBMC includes such areas as infrastructure management and maintenance; human resource management including critical skills recruitment and retention; environmental management and remediation; health, safety and security systems; and, purchasing and other administrative systems.

Under this PBMC, the Contractor shall develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing the missions of the Site. DOE expects the Contractor to produce effective and efficient business and technical management structures, systems, and operations that maintain high levels of safety and quality in accomplishing the work required under this contract. The Contractor shall conduct all work in a manner that is fiscally responsible, optimizes productivity, minimizes waste, and fully complies with all applicable laws, regulations, and terms and conditions of the contract.

The Contractor shall challenge existing paradigms in formulating and implementing safe, high quality, timely, and cost-effective programs and operations at SRS. The Contractor shall use subcontracting (fixed-price is preferred when appropriate) and other innovative methods of accomplishing this Scope of Work consistent with the most efficient and effective means of performance. The Contractor shall tailor the application of contract requirements to the work being performed to be cost effective while safely accomplishing all work in a manner that minimizes risk and fully complies with all compliance agreements, pollution abatement programs, and permit requirements (as required by DEAR 970.5204-2 "Laws, Regulations and DOE Directives"). The Contractor shall implement a comprehensive and integrated contractor assurance system in accordance with DOE Order 226.1B, Implementation of Department of Energy Oversight Policy.

Safe performance of work is an integral part of mission accomplishment at SRS and shall be integrated as a core value into all activities. The Contractor shall systematically integrate safety, security, and environmental protection into management and work practices at all levels so that missions are accomplished while protecting the public, the worker, and the environment. This is to be accomplished through effective integration of safety management into all facets of work including planning and execution and a rigorous feedback and improvement process. The Contractor shall use integrated safety management functions to structure all work activities. These functions include: define the Scope of Work; analyze the hazards; develop and implement hazard controls; perform work within controls; and, provide feedback and continuous improvement. These functions are to be applied on a continuous cycle and tailored to the work activity. The Contractor shall implement recommendations from other organizations which are accepted by DOE and directed by the Contracting Officer

(CO). Compliance with Environment, Safety and Health (ES&H) requirements is a precondition of operations and the earning of fee.

The Contractor shall integrate and manage the safe and effective operation and maintenance of existing and new facilities under their cognizance at SRS to meet the general management goals and performance objectives of this Scope of Work. The Contractor shall use systems engineering techniques to integrate the resources and activities of SRS. The Contractor is responsible for integrating and executing all work under this contract, including but not limited to, management of its personnel and subcontractors at all tiers. The Contractor shall perform in accordance with the terms and conditions herein provided and in accordance with such direction and instruction which the CO or his/her designated representatives of SR and/or NNSA-Savannah River Field Office (SRFO) may provide the Contractor, in writing. All work shall be conducted in accordance with the principles of DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets. The Contractor shall use its expertise and best commercial practices and industry standards in all matters pertaining to the performance of this contract consistent with the provisions of the contract and any direction from the CO.

General Performance Expectations

The general management goals and performance objectives for SRS, as contemplated by the Government Performance and Results Act, are outlined in the SRS EM Program Project Execution Plan (July 2006), the SRS Ten-Year Site Plan (June 2014), the NNSA SRSO FY2007 Limited Ten Year Site Plan (April 2015), as revised and updated from time to time.

This PWS reflects DOE's overarching expectations for contractor performance. Specific performance work statements and measures, and performance expectations, will be established on an annual or multi-year basis, as appropriate. DOE-SR and NNSA Performance Evaluation and Measurement Plans (PEMP) will be established after contract award to define the performance expectations, incentives, measures, and evaluation processes.

As part of the general performance expectations under this contract, all work shall be conducted in a manner that will assure the safety and health of employees and the public, be protective of the environment, safeguard classified information, and protect special nuclear materials.

The Contractor shall:

- establish and maintain a culture of continuous improvement;
- plan strategically in an environment of changing budgets and technical and regulatory requirements;
- implement effective integrated safety, environmental, and security management processes;
- integrate cyber security into all management and work practices, and implement and comply with the applicable DOE Program Cyber Security Plan;
- ensure products and services meet or exceed customer expectations through an integrated and effective Quality Assurance Program;
- use an earned value management system for projects to track progress and increase cost effectiveness;

- maintain and manage to an accurate multi-year performance baseline;
- implement an interface management plan to ensure seamless provision of landlord services to other site tenants;
- establish a culture of scientific inquiry and technical inquisitiveness;
- conduct activities using a project management approach;
- maintain and enhance community, regulatory, and stakeholder relationships;
- maintain scientific and technical expertise and depth to manage activities through the life of a program while maintaining the ability to address emerging mission needs;
- use innovative technologies to reduce costs and improve performance;
- use competition to select subcontractors to provide quality supplies and services to achieve the best value to the government;
- increase cost effectiveness through the use of innovation, commercial practices and industry involvement;
- use benchmarking to compare performance at SRS against best-in-class government and industry organizations and implement improvements;
- implement effective work planning and control and feedback and improvement systems for all activities;
- maintain facilities and assets needed to accomplish assigned missions; and
- use a disciplined system of management and internal business controls to assure safeguarding of government funds and assets.

Exceptions to the Scope of Work

The Scope of Work for this PBMC includes all work necessary for management, operation, maintenance, and support of DOE SRS, except as follows:

- (1) The Liquid Waste (LW) program, currently performed by Savannah River Remediation, will be the subject of a separate contract, and includes:
 - operation of the Defense Waste Processing Facility (DWPF) to produce DWPF canisters;
 - operation of the Actinide Removal Process (ARP) and Modular Caustic Side Solvent Extraction Unit (MCU) to process salt waste until the Salt Waste Processing Facility (SWPF) is operational;
 - operation of the SWPF following transfer of operational responsibility;
 - operation of Tank Farms to deliver waste feeds and closure of liquid radioactive waste storage tanks and evaporators;
 - operation of the Saltstone Facility to process and dispose of low-level waste;
 - operation of the Effluent Treatment Facility (ETF) to process aqueous waste streams; and
 - management and surveillance of F and H Area Tank Farms, ETF, DWPF, SPF, ARP, MCU, and SWPF.
- (2) Natural resources and forest products management activities currently managed by the U.S. Forest Service (USFS) – Savannah River through an interagency agreement between DOE and the USFS-SR .
- (3) Cultural resources management activities currently managed by the Savannah River Archaeological Research Program through a cooperative agreement between DOE and

the University of South Carolina.

- (4) Basic and applied ecological research, education activities, and outreach efforts currently managed by the Savannah River Ecology Laboratory through a cooperative agreement between DOE and the University of Georgia.
- (5) Site security currently managed under a DOE prime contract with Centerra Group, LLC.

The CO may withdraw work from the PWS during the course of this contract.

SCOPE OF WORK - MISSION AREAS

EM Closure Activities

(a) Soil and Water Remediation

The Contractor shall plan and safely execute a program that meets all regulatory commitments reflected in the SRS Federal Facility Agreement, Resource Conservation and Recovery Act (RCRA) permit and closure plans, settlement agreements, administrative orders, consent decrees, notices of violation(s), Memoranda of Agreements or other notices of direction from DOE and/or regulatory agencies. This includes, but is not limited to, the identification, characterization, assessment, remediation and post-closure maintenance/monitoring of soil, surface water, groundwater waste units and Deactivation and Decommissioning (D&D) residuals. The Contractor shall implement remedial actions consistent with the Area Completion Strategy. The Contractor shall develop and implement alternative long range strategies, appropriate technologies, and approaches in the refinement of Area Completion and long-term stewardship to reduce out-year baseline costs.

(b) Deactivation and Decommissioning

The Contractor shall conduct D&D of facilities and their ancillary structures as directed by DOE. The Contractor shall also dispose of structures and facilities related to these facilities, such as sheds, canopies, air conditioning units and excess trailers.

The Contractor shall provide the overall management of the D&D program at SRS. D&D activities may include relocation of existing functions and personnel, characterization, risk analysis, evaluation of alternatives, stabilization, and final decommissioning. All D&D activities shall be conducted through an integrated approach with soil and water remediation requirements in accordance with the established regulatory interaction protocols. D&D activities, and the integrated approach within, must take into account historic properties and historic preservation requirements.

(c) Solid Waste

The Contractor shall manage the Solid Waste Program to safely and effectively prevent and/or minimize the generation of solid waste to include hazardous, low-level, transuranic, mixed, and municipal sanitary wastes. The Contractor shall ensure that the handling, treatment, storage, transportation and disposal of existing "legacy" and future solid waste is environmentally sound and in compliance with DOE Directives, and applicable regulations

and requirements.

The Contractor shall manage and integrate site-wide solid waste recycling, treatment, storage, disposal and transportation activities and implement waste minimization/pollution prevention initiatives. The Contractor shall also provide on-site/off-site waste generators with technical support and verification of compliance with waste acceptance criteria, including Safety Basis and Performance Assessment objectives.

Specific scope includes but is not limited to the following:

- maintaining the Solid Waste management facilities to support site operations, including the construction debris landfill.
- maintaining all stored waste streams in a safe configuration until treatment, processing, disposition, or off-site shipment is planned and authorized;
- retrieve, characterize, and prepare legacy Transuranic (TRU) waste for shipment off-site. The Solid Waste Program manages the disposition of legacy waste and closure of legacy TRU pads that are located at the SRS;
- maintaining an appropriate nuclear safety basis for the waste streams;
- supporting treatment, storage, and disposal of newly generated LLW, Mixed Low-Level Waste (MLLW), hazardous waste, and sanitary waste;
- meeting the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC) and the state of New Mexico RCRA permit requirements; and
- providing surveillance and maintenance for the Consolidated Incinerator Facility (CIF).

(d) Nuclear Materials Management

The Contractor shall safely and effectively manage nuclear materials and facilities in accordance with applicable DOE Directives and requirements. Management of nuclear materials at SRS includes four distinct but integral functions: receipt, storage, operations, and disposition.

- (1) Receipt: The Contractor shall conduct activities to accept receipts of nuclear materials in support of the non-proliferation program of the United States. These receipts may be from domestic or foreign sources. Receipt includes the review of the material to ensure the safety of the SRS storage and processing facilities.
- (2) Storage: The Contractor shall conduct activities to place and maintain nuclear materials in a safe, secure, and stable form. These materials include both plutonium and spent nuclear fuel (SNF) that may have originated from past operations or from U.S. and foreign countries. Storage shall be managed safely, securely, and efficiently to support site and DOE disposition missions.
- (3) Operations: The Contractor shall operate and maintain F Area (excluding F Tank Farm), the H Canyon Complex, K Area, and L Area to support storage and disposition of nuclear materials and SNF, as required by DOE. For planning purposes, DOE has assumed that H Canyon operations will contribute up to 300,000 gallons per year to the Tank Farm through the base contract period of both this and the Liquid Waste contract.

The Contractor shall maintain an effective program to facilitate safe and secure nuclear material shipments. The Contractor shall stabilize, de-inventory, and transition excess

nuclear facilities and ancillary structures for D&D.

(4) Disposition:

- i. Plutonium Disposition: The Contractor shall continue to blend down surplus plutonium for disposition in the Waste Isolation Pilot Plant (WIPP).
- ii. SNF Disposition: The United States decided to process SNF in H Canyon. This includes up to 1,000 bundles of Material Test Reactor (MTR) SNF and 200 High Flux Isotope Reactor (HFIR) cores stored in L Area. The resulting highly enriched uranium solutions will be down blended to meet predetermined user specifications for low enriched uranium (LEU), loaded, and shipped to a Tennessee Valley Authority vendor for fuel fabrication. The contractor will also develop plans for the disposition of the remaining SNF for geologic disposal

Savannah River National Laboratory (SRNL)

SRNL's three-fold mission is to enable the success of SRS operations; to provide technical leadership for future site missions; and to utilize its technical expertise to provide vital national and regional support in achieving the broader goals of DOE and the federal government in a safe manner. The vision for SRNL is to be the nation's premier applied science laboratory in Environmental Management, National and Homeland Security, and Energy Security by delivering world-class innovative performance in national defense and homeland security technologies, hydrogen technology and cleanup. To accomplish these missions and to attain this vision, the Contractor shall perform the following activities in a manner that is consistent with the SRNL Strategic Plan.

The Contractor shall increase the effectiveness of SRNL as EM's Corporate National Laboratory across the EM complex and position SRNL for transition into a financially sustaining, distinct business unit. To attain this objective, the Contractor shall operate SRNL as a defined work activity within the overall contract structure. The defined work activity shall include budget, real estate, personnel resources necessary to conduct research and development, technology transfer, operations, and maintenance, and support necessary to be obtained from other activities within the contract or from other contractors. In addition, the Contractor shall seek to diversify its customer base and funding sources for SRNL to increase efficiencies for the benefit of all of its customers.

The Contractor shall implement a strategy to maintain and enhance SRNL as a pre-eminent center for research, development, and deployment of technologies to cleanup the environmental legacy of the Nation's nuclear programs. The Contractor shall develop SRNL to be a major center for technologies to advance the nuclear fuel cycle of the future, nuclear hydrogen initiative, and civilian hydrogen storage and related research initiatives. The Contractor shall maintain SRNL as a center for research, development, and application for tritium weapons components and key technologies for non-proliferation and international safeguards.

The Contractor shall maintain and enhance the core competencies that are necessary to support assigned and future missions of EM and NNSA programs at SRS. These core competencies include chemical and radiochemical processing, environmental science and technology, analytical chemistry, engineering specialty systems, materials science, sensor development, hydrogen and tritium science and technology, and computational science and

modeling. The Contractor shall conduct a Laboratory Directed Research and Development Program in accordance with DOE policy. The Contractor shall establish SRNL as a preferred partner for industry, universities, and small businesses in developing leading edge technologies in support of industrial, economic, and educational strength of the United States. The Contractor shall develop, maintain, and fully utilize appropriate world class research and development consistent with providing for the long-term independent sustainability of SRNL. Furthermore, the Contractor shall continually seek ways to leverage program funding through partnerships and sharing costs with industry in areas of mutual benefit.

The Contractor shall conduct math, science, and education programs, to include the requirements of the Energy Policy Act of 2005, as well as support such other programs as directed by DOE.

NNSA Activities

(a) Tritium Operations (Defense Programs)

The Contractor shall manage Tritium Operations as a defined, severable work activity within the M&O contract structure so that it will be positioned to be responsive to any future direction within the NNSA Nuclear Weapons Complex.

The Contractor shall conduct the operations of the Tritium Facilities to:

- support the nuclear weapons stockpile by safely providing tritium and non-tritium loaded reservoirs to the Department of Defense in accordance with NNSA guidance and direction;
- extract tritium from irradiated Tritium-Producing Burnable Absorber Rods (TPBARs);
- support the Stockpile Stewardship Program through reservoir surveillance operations;
- conduct a Plant Directed Research and Development Program to retain and recruit individuals with critical skills, maintain core competencies required for current and future technical missions, increase industrial and university partnerships to enhance technical capabilities;
- maintain the Tritium Facilities in a safe, secure and responsive operating condition; and
- operate the NNSA Tritium operations and activities as a defined, severable cost center within the contract, to include budget, real estate, personnel resources necessary to conduct operations and required maintenance, and support to be obtained from other activities within the contract or from other contractors.

(1) Directed Stockpile Work (DSW)

The Contractor shall conduct DSW activities, such as processing tritium and inert reservoirs and associated components, in support of the Interoperable Warhead-1 (IW-1) activities and Life Extension Programs (LEPs) including pre-production, production, and evaluation associated with the refurbishment of the B61, W76, and W80. The Contractor shall provide Stockpile Services, and Production Support, including LEPs and the Stockpile Systems categories of Limited Life Component Exchange (LLCE), Reservoir Surveillance, Stockpile Laboratory Tests (SLTs), and Life Storage Program (LSP) activities. The Contractor shall process reservoirs and associated parts as necessary to

support LLCE schedules per production directive requirements for the enduring stockpile. For Retired Systems, the Contractor shall unload, weld close for disposal, or manage per SLT requirements, reservoirs returned from retired weapons.

(b) Nuclear Nonproliferation Programs

The Contractor shall provide services in support of the Nuclear Nonproliferation Programs at SRS. The Contractor shall support both new facilities development activities and program mission support activities as specified below.

- (1) Mixed Oxide Fuel Fabrication Facility (MFFF): The MFFF will be used to manufacture MOX fuel assemblies for use in commercial nuclear power reactors. For the MFFF and MOX program, the Contractor shall provide Title III Engineering Support with some regulatory and site interface support work
- (2) Waste Solidification Building (WSB): The Waste Solidification Building will be maintained in a lay-up state until a final decision is made concerning MFFF.
- (3) Highly Enriched Uranium (HEU) Blend Down Project: The United States declared over 174 metric tons (MT) of HEU surplus to defense needs. The Uranium Program includes disposition of the Off-Specification HEU material from SRS to the Tennessee Valley Authority (TVA). These materials include solutions processed from both irradiated and un-irradiated fuel as well as HEU ingots. The Contractor shall blend, load and ship the Low Enriched Uranium material. The Contractor shall prepare ingots for shipment directly to the TVA fuel manufacturer.
- (4) The Contractor shall also provide scientific, technical, program, and project expertise to support the following programs:
 - (i) International (Nonproliferation) Programs: The overall mission of Defense Nuclear Nonproliferation international programs is to detect, prevent, and reverse the proliferation of weapons of mass destruction while promoting nuclear safety worldwide. The Contractor shall support NNSA and its other contractors in executing these programs by providing the necessary scientific, engineering and programmatic experts, e.g. nuclear material protection, control, and accountability; nuclear safeguards; emergent threats; export controls; and nuclear verification activities.
 - (ii) Foreign Research Reactor (FRR) Fuel Program: The Contractor shall assist foreign entities with arranging shipments and supporting shipping activities, be responsible for receipt and storage of spent nuclear fuel at SRS, and perform offsite radiological support activities.

(c) Radiological Assistance Program (RAP)

The Contractor shall support NNSA in executing the RAP within DOE Region 3, which encompasses the states of Alabama, Florida, Georgia, North Carolina, and South Carolina. The mission of RAP is to provide a deployable, tailored capability to assist other Federal, State, Tribal and local agencies, as well as private businesses and individuals, in responding to offsite incidents involving nuclear/radiological materials. RAP responds to a variety of

incidents, including those involving fixed facilities, transportation events, lost or stolen sources, nuclear weapons, and terrorist use or threatened use of nuclear/radioactive materials. The Contractor shall maintain the plans, procedures, trained personnel, and calibrated equipment necessary to accomplish the RAP mission. In addition, the Contractor shall support RAP by providing teams, with rotating on-call duties, such that one team is continuously ready for deployment.

Landlord Services and Site Support

The Contractor shall execute assigned landlord responsibilities and provide a range of services to other organizations doing work on the SRS. This section includes Environmental Safety and Health (ES&H); Engineering and Construction; Operations Support; and Business Services.

(a) ES&H

(1) Sitewide ES&H Program

The Contractor shall conduct a comprehensive ES&H program that provides for the protection of workers, the public, and the environment. The Contractor shall include provisions for the protection of human health and safety and the environment in all activities for which it has contractual responsibilities. The Contractor shall implement and continuously improve the existing ES&H program and shall conduct its activities in full compliance with ES&H requirements per applicable laws, regulations, and DOE directives. The Contractor shall include, as a minimum, the following disciplines as part of its ES&H program:

- nuclear safety (including criticality safety);
- occupational, industrial, and construction safety;
- industrial hygiene;
- quality assurance;
- radiation protection;
- hazardous material management;
- environmental Management System;
- environmental permitting and compliance (including NEPA);
- environmental monitoring;
- pollution prevention and waste minimization;
- technical training and qualification;
- conduct of operations and occurrence reporting; and
- radiological assistance and/or support for emergency response.

As part of its overall performance assurance program, the Contractor shall implement a sitewide ES&H program, including the assumption, management, improvement, and integration of an Integrated Safety Management System (ISMS), that not only covers the Contractor's organizations but also other organizations performing work for the Contractor via subcontracts and other agreements at SRS. The Contractor shall manage the overall

site ES&H program which shall be followed by all site contractors, subcontractors, vendors, and suppliers, as required by their individual contracts or agreements; however, the Contractor shall only be responsible for compliance of its operations and those of its subcontractors and not responsible for the performance or compliance of other contracts over which it possesses no direct contractual relationship. In managing the Site ES&H program, the Contractor shall work with and coordinate with other Site organizations and contractors to ensure consistent programs are implemented at SRS to realize efficiencies and cost savings for the overall Site. The Contractor shall provide appropriate support, as needed, in emergency situations. The Contractor shall also provide ES&H support to others when directed by DOE; this may include activities such as onsite and offsite environmental analysis and assisting in the preparation of required regulatory information.

The Contractor shall implement and maintain a set of requirements to ensure the protection of human health and safety and the environment. In the event the Contractor becomes out of compliance, appropriate action to protect human health and safety and the environment shall be taken until compliance is reestablished. Although the Contractor shall not be responsible for ES&H compliance of other site contractors with which it does not possess a direct contractual relationship, the Contractor shall report to DOE any known or suspected performance of other site contractors which is not in compliance with the site ES&H program requirements.

The Contractor shall work effectively with other site contractors, subcontractors, and external organizations to maintain and improve ES&H performance at SRS. The Contractor shall ensure ES&H excellence in their subcontractor performance and flow-down of all applicable requirements to their subcontractors. The Contractor shall consider ES&H performance as an evaluation factor in the selection of subcontractors performing work in Government owned or leased facilities.

The Contractor shall periodically evaluate the site ES&H program for effectiveness by using management and independent assessments, monitor ES&H performance continuously by the use of ES&H performance indicators, and effect continued ES&H improvement in a cost-effective manner. The Contractor shall use these tools and others identified in its contractor assurance system in the implementation of DOE Order 226.1B, Implementation of Department of Energy Oversight Policy.

(2) Development and Maintenance of Nuclear Safety Documentation

As part of the overall Site ES&H program, the Contractor shall be responsible for implementing a program that will ensure that nuclear safety requirements are implemented consistently across SRS and for periodically evaluating the program's effectiveness. The Contractor shall comply with 10 CFR 830 which includes the safety basis and quality assurance requirements for contractors and operators of Hazard Category 1, 2, and 3 DOE nuclear facilities to develop and maintain a safety basis and to perform work in accordance with the safety basis.

The Contractor shall ensure that facilities that contain many different types of hazards are addressed in a systematic and integrated way. A hazardous facility's safety basis is its specific safety strategy. The Contractor shall operate facilities in accordance with the DOE approved safety basis.

(b) Engineering and Construction

The Contractor shall perform engineering, design, and construction management as needed for its activities within this Scope of Work and for other SRS activities as directed by the CO. The Contractor shall use appropriate contracting mechanisms for design and construction services, with a preference for fixed-price, performance-based contracting to the maximum extent practicable. DOE reserves the right to assign design and construction management responsibility for individual projects to organizations other than the Contractor.

The Contractor shall perform the following for its activities and for other activities as directed by the CO.

(1) Engineering, Design and Technical Services. The Contractor shall provide or procure centralized engineering services to implement programs for:

- planning and integrating all activities related to engineering, design, procurement, and construction services;
- architect-engineering services in accordance with South Carolina Code of Laws Title 40 as required to support design activities;
- engineering automation to include assumption of maintenance of, and improvements to, the existing SRS computer based engineering, design, and construction support systems, which include CAD (Intergraph Microstation) and 3-D modeling capability (Intergraph PDS);
- systems engineering;
- configuration management;
- suspect parts;
- all Site geotechnical activities including associated analysis and engineering;
- nuclear Safety engineering to include criticality engineering;
- pressure protection to include the capability to satisfy the ASME “R” and “U” stamp requirements;
- natural phenomena hazards mitigation engineering;
- engineering document control;
- process and Control engineering;
- geographic Information Services;
- a systematic project management system which provides cost estimating, scheduling, and change control systems for establishment and maintenance of an appropriate technical baseline;
- non-destruction testing and examination services;
- fire protection system design and engineering;
- welding training and certification program for on-site activities which may include unique and exotic materials and processes; and
- quality assurance and control services to support various site activities that are based on but not limited to International Building Code, ISO 9000, Six Sigma, and ASME NQA-1.

(2) Construction Management Services. The Contractor shall provide or procure:

- construction services as required to meet contract requirements;
- capabilities for maintenance and repair of facilities, heavy equipment, and infrastructure;
- services to assume, revise, implement, and maintain an effective construction safety program;
- construction services that satisfy the South Carolina Code of Laws Title 40 requirements for construction contractors and managers;
- construction and fabrication services for existing and new equipment, and existing contaminated equipment; and
- maintenance services for large portable equipment customarily used in providing construction and transportation services.

(3) Integration Services. The Contractor shall implement, maintain, and/or enhance the following for its activities and for other activities as directed by the CO:

- a Conduct of Engineering and Construction program;
- engineering and construction, and site standards;
- designs that properly reflect all customer/engineering/ construction interfaces and requirements;
- a centralized and standardized specification system similar to industry;
- a centralized final technical document review system that applies to all site final design and/or final technical documents prior to release for solicitation;
- other construction related services, such as schedule coordination to avoid conflict with other projects; construction site orientation; safety program monitoring; utility service coordination; security badging; determination of progress payments for work accomplished; change management; and management of construction goods and services; and
- cost, technical, and schedule performance measures in subcontracts.

(c) Emergency, Safeguards, and Security Services

Manage safeguards, security and emergency service activities at the Savannah River Site (SRS), excluding physical security and law enforcement. Execute policies and programs in the areas of:

- physical, information, internal, and personnel security and badging;
- classification and declassification;
- computer security;
- cyber security;
- nuclear materials control and accountability;
- site security plans;
- emergency management/preparedness; and
- emergency services.

Specific programs include, but are not limited to: Physical Security; S&S Program

Management; Material Control and Accountability; Emergency Management/Preparedness; Emergency Services; Personnel Security; Human Reliability Program (HRP); Homeland Security Presidential Directive (HSPD)-12; Information Security; Classification and Unclassified Control Information Programs; export control program; and Protective Force facility maintenance.

Ensure the implementation of security programs using a graded approach and the most recent DOE and local threat guidance. Manage and oversee the implementation of security areas with integral secure storage facilities to provide protection to a wide array of S&S interests under the Department's purview, to include Special Nuclear Material, classified information, unclassified sensitive information, buildings, facilities, Government property, employees and other interests to deter and detect unauthorized access and/or activities.

Manage the Technical Security Program, as prescribed by DOE Order 470.6, to include functions related to TEMPEST, protected distribution systems, wireless security and communications security (except TSCM Services), TSP reviews, COMSEC utilization determinations, and TEMPEST reviews.

(d) Operations Support

The Contractor shall assist DOE through direct participation and other support in achieving DOE's energy efficiency goals and objectives in electricity, water, and thermal consumption, conservation, and savings, including goals and objectives contained in Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management." The Contractor will maintain and update, as appropriate, its Site Plan (as required elsewhere in the contract) to include detailed plans and milestones for achieving site-specific energy efficiency goals and objectives. The above work scope will be prioritized annually within the DOE-CFO approved funding levels.

The Contractor shall implement site-wide programs and coordinate their implementation with all site organizations. The Contractor shall provide technical support for all its activities and operations. The Contractor shall also provide technical support for other organizations as directed by the CO or as requested by other organizations and approved by the CO. Except as otherwise directed by the CO, services to other contractors generally do not extend to within their facilities or areas under the control of other tenant organizations. These services include, but are not limited to:

- infrastructure maintenance (e.g., roads, bridges, dams, parking lots, and grounds) except as controlled by other tenant organizations;
- maintenance and repair of facilities and equipment;
- operation of utility systems including water, sewage, electrical and steam distribution;
- transportation and traffic management;
- receiving, inspection, and distribution;
- site training;
- technical and analytical laboratory operations;
- facility and site use planning; and
- Historic preservation.

- transportation and mechanical services which include emergency specialty equipment services, transportation services on site and off site (non-nuclear), fuel management (all types), fire protection engineering, and fire test and maintenance (outside the nuclear fence).
- Quality Assurance
- Procurement
- Records Management

(e) Business Services

- (1) The Contractor shall provide general planning, management and administrative services for all its activities and for other organizations as directed by the CO. Business services include, but are not limited to:
 - strategic planning, program planning, and long and short range planning;
 - procurement;
 - accounting, budgeting and financial management;
 - personnel administration;
 - labor relations;
 - employee concerns;
 - information management services, which include information strategic planning, Information Systems development, systems engineering infrastructure upgrades and improvements, system integration and configuration management, desktop/WAN production (operations, Help Desk, maintenance), cyber security program management, communications infrastructure including maintenance of radios, pagers, radio towers, conferencing (video and telephone) and cellular communications.
 - health and human services, which include medical services, injury/illness record-keeping and monitoring, and health physics instrument calibration and distribution.
 - real and personal property management;
 - legal;
 - internal oversight (internal audit and contracts audit);
 - public affairs; and
 - other administrative services.
- (2) The Contractor shall provide project costs in a manner that enables input into the DOE Environmental Cost Analysis System (ECAS) database.
- (3) Engineering Campaign

The goal of the Engineering Campaign is to provide validated engineering sciences and engineering modeling and simulation tools for design, qualification, and certification; improved surety technologies; radiation hardening design and modeling capabilities; microsystems and micro-technologies; component and material lifetime assessments; and predictive aging models and surveillance diagnostics. The subprograms of the Engineering Campaign are Enhanced Surety, Weapons Systems Engineering Assessment Technology, Nuclear Survivability, and Enhanced Surveillance. In support of the Enhanced

Surveillance subprogram, the Contractor shall develop methods for surveillance of tritium reservoirs and other gas transfer system components.

(4) Readiness Campaign

Support the ramp-up of tritium production as described in the Stockpile Stewardship and Management Plan (SSMP).

- (i) Prepare and execute full Tritium Extraction Facility (TEF) operational capability. TPBAR production and extraction is required to increase in the out years.
- (ii) Plan for and perform sustained peak loading periods.
- (iii) Support next generation tritium processing through the Hydrogen Processing Demonstration System (HPDS) and associated systems.

(5) Readiness in Technical Base and Facilities (RTBF)

The Contractor shall conduct RTBF work to maintain the tritium facilities and infrastructure in a state of readiness in support of DSW missions, including LEPs, Stockpile Services, and Production Support. The Contractor shall conduct preventive, predictive, and corrective maintenance of process and infrastructure equipment/facilities. ES&H activities shall be conducted to ensure the well-being of tritium and other site workers, the public, and the environment. The Contractor shall conduct Material Recycle and Recovery, which involves recovery and purification of tritium, deuterium, and helium-3 gases from reservoir recycle gas, hydride storage vessel, and facility effluent-cleanup systems. The Contractor shall perform physical maintenance of various shipping containers, and conduct operational and technical activities related to Pressure Vessels. Replace outdated chillers to be in compliance with EPA regulations.

Tritium Production Capability (TPC) project is a line item project that will refurbish and modernize tritium operations into upgraded and right-sized facilities. There is an option for the Contractor to provide Title II and Title III engineering, construction management, and startup and testing. The Contractor will operate the facilities.

WORK FOR OTHERS/TECHNOLOGY TRANSFER

The Contractor shall conduct the Work for Others program consistent with applicable DOE Directives. All Work for Others activities shall be approved in advance, in writing, by the CO.

The Contractor shall perform Technology Transfer activities in accordance with DEAR 970.5227-3 "Technology Transfer Mission." The Contractor shall identify technology transfer opportunities to share with industry. The Contractor shall routinely, as a matter of conducting business, identify and evaluate technologies that are potential candidates for commercial exploitation. Upon CO approval, the Contractor shall establish industry partnerships that will allow the appropriate sharing of technologies using all means allowable under the Stevenson-Wydler Technology Innovation Act of 1980.

RESPONSIBILITIES FOR SPONSORSHIP, MANAGEMENT AND ADMINISTRATION OF CONTRACTOR EMPLOYEE PENSION AND OTHER BENEFITS PLAN

The Contractor shall be the main sponsor of the multiple employer pension plan, herein referred to as the Plan, for Incumbent Employees (and retired plan participants) with responsibility for management, administration, funding, coordinating contributions from other plan sponsors and maintaining the qualified status of the plan. The Contractor shall also sponsor and be responsible for management and administration of welfare benefit plans for Incumbent Employees. In addition, the Contractor shall sponsor and be responsible for management and administration of the pension and medical benefit plans for Non-Incumbent Employees.

Although the Contractor will be the main sponsor of the Plan, it will only be responsible for funding pension contributions for Incumbent Employees working under this Contract. The contractor for the Liquid Waste contract and other DOE prime contractors will also be participating sponsors of the Plan. These contractors will be responsible for pension contributions for employees employed under their respective contracts.