

PART I - THE SCHEDULE

SECTION C

DESCRIPTION/SPECIFICATION/WORK STATEMENT
DESCRIPTION OF WORK AND SERVICES

TABLE OF CONTENTS

| <u>SECTION</u> | <u>Page</u> |
|--|--------------------|
| C-1 GENERAL INFORMATION | 1 |
| C-1.1 Introduction..... | 1 |
| C-1.2 Scope of Work - General | 1 |
| C-1.3 General Performance Expectations | 3 |
| C-1.4 Exceptions to the Scope of Work..... | 4 |
| C-2 WORK AUTHORIZATION | 6 |
| C-3 SCOPE OF WORK - MISSION AREAS | 6 |
| C-3.1 Environmental Management (EM) Closure Activities..... | 6 |
| C-3.2 Savannah River National Laboratory (SRNL)..... | 8 |
| C-3.3 National Nuclear Security Administration (NNSA) Activities | 9 |
| C-3.4 Landlord Services and Site Support | 12 |
| C-4 WORK FOR OTHERS/TECHNOLOGY TRANSFER | 18 |
| C-5 INTERFACES WITH OTHER SITE USERS..... | 18 |

PART I - THE SCHEDULE

SECTION C

DESCRIPTION/SPECIFICATION/WORK STATEMENT
DESCRIPTION OF WORK AND SERVICES

STATEMENT OF WORK (SOW)

C-1 GENERAL INFORMATION

C-1.1 Introduction

This Performance-Based Management Contract (PBMC) is for the management and operation of the Savannah River Site (SRS) and those activities as specified in this statement of work. The definition of a management and operating (M&O) contract can be found at FAR 17.6 and DEAR 917.6.

The SRS is a 310-square mile DOE industrial facility located in Aiken, Allendale, and Barnwell Counties in South Carolina. SRS is dedicated to environmental management cleanup, developing and deploying technologies to support the cleanup mission, providing capability for supporting the enduring nuclear weapons stockpile, and processing and storing nuclear materials in support of the U.S. nuclear non-proliferation efforts. DOE's Office of Environmental Management (EM) is the landlord for the SRS and responsible for cleanup missions and the Savannah River National Laboratory (SRNL). The SRNL is a Federally Funded Research and Development Center (FFRDC) established in accordance with FAR Part 35 and operated under this M&O contract. The National Nuclear Security Agency (NNSA) is responsible for supporting the nuclear weapons stockpile programs and nonproliferation activities on the Site.

This contract reflects the application of performance-based contracting approaches and techniques which emphasize results and minimize "how to" performance descriptions. The Contractor has the responsibility for total performance under the contract, including determining the specific methods for accomplishing the work effort, performing quality control, and assuming accountability for accomplishing the work under the contract. Accordingly, this PBMC provides flexibility, within the terms and conditions of the contract, to the Contractor in managing and operating SRS activities.

C-1.2 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 in Section C.3 as well as any new activities that may be assigned during the term of the contract. This PBMC further includes 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 the status-quo and 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 waste and fully complies with all compliance agreements, pollution abatement programs, and permit requirements (as required by the Laws, Regulations and DOE Directives clause). The Contractor shall implement a comprehensive and integrated contractor assurance system in accordance with DOE Order 226.1, 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 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 [such as the Defense Nuclear Facilities Safety Board (DNFSB), and state and federal regulatory agencies] 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 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-SRSO may provide the Contractor, in writing, in accordance with the clause in Section I entitled, "Technical Direction." All work shall be conducted in accordance with DOE Order 413.3A, 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.

C-1.3 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 (PEP), the SRS Ten-Year Site Plan (March 2006), the NNSA Savannah River Site Office (SRSO) FY2007 Limited Ten Year Site Plan, and the SRNL Strategic Plan, as revised and updated from time to time. General performance expectations are also defined in this section and in the Work Authorization documents which are incorporated by reference into this contract in accordance with the clause in H entitled "Work Authorization System."

This Statement of Work 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. A Performance Evaluation and Measurement Plan will be established after contract award that defines the performance expectations, incentives, measures, and evaluation processes.

The general performance expectations for the conduct of work under this contract include, but are not limited to:

- (a) All work under this Contract 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.
- (b) 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 an effective integrated safety and security management process;
- 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;
- establish a disciplined approach to integrate, partner with, and/or support other site contractors;
- 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.

C-1.4 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:

- (a) The Liquid Waste (LW) program, currently performed by the incumbent contractor, will be the subject of a separate contract, and includes:
 - Operation of the Defense Waste Processing Facility (DWPF);
 - Operation of the Deliquification, Dissolution, and Adjustment (DDA) process;
 - Operation of the Actinide Removal Process (ARP) and Modular Caustic Side Solvent Extraction Unit (MCU) until the Salt Waste Processing Facility

- (SWPF) is operational;
- Operational closure of liquid radioactive waste storage tanks and evaporator;
 - Operation of the Saltstone Facility and SWPF (after construction and turnover); and
 - Management and surveillance of F and H Area Tank Farms, the Effluent Treatment Project, DWPF, DDA, ARP, MCU, and SWPF.
- (b) Natural resource management activities and timber management currently conducted through an interagency agreement with the U.S. Forest Service
- (c) Basic ecological research currently conducted by the University of Georgia through the Savannah River Ecology Laboratory
- (d) Site security currently managed by Wackenhut Services Incorporated

In accordance with the clause in Section H entitled “Withdrawal of Work,” the CO may withdraw work from the Statement of Work during the course of this contract. For informational purposes only, and not as a limitation as to what work may be withdrawn, the CO is evaluating the following work for separate small business set-asides:

- Transportation & Mechanical: Emergency Specialty Equipment Services; Transportation Services (non-nuclear); Fuel Management; Fire Protection Engineering; Fire Test and Maintenance (outside nuclear fences);
- Health & Human Services: Medical Services; Injury/Illness Recordkeeping; HP Calibration/Instrumentation;
- Records Management: Technical Library Services; Records Administration; Historical/Archeological Restoration;
- Infrastructure Services: Asset Management; Construction Waste Disposal; Environmental Recycle; Roads, Bridges, Parking Lots, (outside nuclear fences); Utilities (Water, Sewer) excludes steam; Other Utilities – Chillers; Administrative Buildings Operations and Maintenance, and Diesel and Fire Maintenance (A and B Areas); Sanitary Solid Waste Programs; Wildlife Population Control (Deer Hunts); Janitorial Services & Pest Control; Grounds Maintenance; Minor Repair and Alteration of Facilities; and
- Information Management Services: Computing Infrastructure; Communications Infrastructure; Maintenance of Radios, Pagers and Radio Towers; and Project Controls.

The Contractor is required to provide the above referenced services until discrete scopes of work are formally withdrawn by the CO. It is anticipated that work will be withdrawn in a phased manner over the first two to three years of the base period of the contract. DOE-SR is developing a Site Small Business Plan which will indicate the sequence of the work to be withdrawn from the M&O contract and awarded to small businesses.

C-2 WORK AUTHORIZATION

In addition to the general requirements of this SOW, work to be accomplished under this contract is defined in accordance with the clause in Section H, entitled “Work Authorization System.” The specific work to be executed under this contract may be supplemented by formal technical direction pursuant to the clause in Section I entitled, “Technical Direction” and the clause in Section H, entitled, “Performance/Technical Direction.”

C-3 SCOPE OF WORK - MISSION AREAS

C-3.1 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 Closure 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, except activities for which DOE contracts directly with third parties. In such circumstances, the Contractor shall provide site interface and support as directed by DOE. 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.

(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 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.

(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 three distinct but integral functions: storage, operations, and disposition.

- (1) Storage: The Contractor shall conduct activities to place and maintain nuclear materials in a safe, secure, and stable form. These materials include spent nuclear fuel that may have originated from past operations or from U.S. and foreign research reactors. Storage shall be managed safely, securely, and efficiently to support site and DOE complex-wide consolidation and disposition missions.
- (2) Operations: The Contractor shall operate and maintain the H Canyon Complex to support stabilization and disposition of nuclear materials and spent nuclear fuel, as required by DOE. The Contractor shall maintain an effective program to facilitate safe and secure nuclear material shipments consistent with the current authorization agreement and subsequent revisions. The Contractor shall stabilize, de-inventory, and transition excess nuclear facilities and ancillary structures for D&D.
- (3) Disposition: The Contractor shall plan for and disposition nuclear material and spent nuclear fuel in coordination with the NNSA Nuclear Nonproliferation Program and other applicable DOE programs. This includes the development of capability to disposition surplus plutonium and to prepare spent nuclear fuel for geologic disposal.

C-3.2 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 National Security, Energy Security, and Environmental Management 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 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 distinct business unit. To attain this objective, the Contractor shall operate SRNL as a severable work activity within the overall contract structure. The severable 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 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 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 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 DOE may, from time to time, direct.

C-3.3 NNSA Activities

(a) Tritium Operations

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;
- 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
- Position the NNSA Tritium operations and activities as a defined, severable cost center within the M&O contract structure, to include budget, real estate, personnel resources necessary to conduct operations and required maintenance, and support to be obtained from other activities within the M&O 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 Reliable Replacement Warhead (RRW) 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 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.

(2) 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 microtechnologies; 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.

(3) Readiness Campaign

(i) In support of the Tritium Readiness subprogram, the Contractor shall operate the Tritium Extraction Facility (TEF) as an integrated part of the Tritium Facilities. The TEF provides the capability to receive and extract tritium-containing gases from tritium producing burnable absorber rods to provide sufficient tritium to support stockpile requirements.

(ii) In support of the Advanced Design and Production Technologies (ADAPT) subprogram, the Contractor shall conduct site-specific ADAPT projects, such as:

- The Reservoir Development project;
- The Tritium Processing project;
- The Metal Alloy project;
- The Automated Reservoir Management System (ARMS) Replacement project; and
- Support the ADAPT Technology Investment projects, Thrust Areas project and the Program Management Control project across the NWC.

(4) 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.

(b) Nuclear Nonproliferation Programs

The Contractor shall provide services in support of the Nuclear Nonproliferation Programs at SRS to include varying types of support to NNSA and its contractors as specified below.

- (1) Pit Disassembly and Conversion Facility (PDCF): The PDCF will be used to disassemble classified nuclear weapons components and convert nuclear material to feedstock for the Mixed Oxide (MOX) Fuel Fabrication Facility. The Contractor shall serve as design authority during design of the PDCF and will operate and maintain the PDCF after construction. The construction contractor is to be determined by separate contracting action.
- (2) 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 support NNSA in oversight of the design and licensing of the facility, and integrating its operation into SRS systems.
- (3) Waste Solidification Building (WSB): The Waste Solidification Building sub-project will provide a disposition path for MFFF and PDCF liquid radioactive waste streams, e.g., MFFF High Alpha waste stream, MFFF Stripped Uranium waste stream, and PDCF Laboratory liquid waste stream. The Contractor shall develop design output documents for construction of the WSB, support the facility startup, and operate and maintain the facility.
- (4) 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 unirradiated 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.

- (5) 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-3.4 Landlord Services and Site Support

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

These activities comprise the infrastructure supporting SRS:

(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 the contract clauses in Section I entitled “Laws, Regulations, and DOE Directives” and “Integration of Environment, Safety and Health into Work Planning and Execution.” 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;
- Transportation safety;
- Industrial hygiene;
- Occupational medicine;
- Quality Assurance;
- Fire protection;
- Radiation protection;
- Hazardous material management;
- Environmental compliance, management and protection;
- Environmental monitoring;
- Pollution prevention and waste minimization;
- Technical training and qualification;
- Conduct of operations and occurrence reporting;
- Radiological assistance and/or support for emergency response, including DOE-HQ Radiological Assistance Program team support; and
- Contractor assurance system (e.g., assessment programs, event reporting, worker feedback, issues management, lessons learned, and performance monitoring).

As part of its overall performance assurance program, the Contractor shall implement an 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 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 support for any activity onsite, 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. When activities are not in compliance with appropriate requirements, the Contractor shall accept notices of violations or fines in accordance with the provisions of the contract clause in Section H entitled "Contractor Acceptance of Notices of Violations/Fines and Penalties." 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 (e.g., the DNFSB, South Carolina Department of Health and Environmental Control, Environmental Protection Agency) to maintain and improve ES&H performance at SRS. The Contractor shall ensure ES&H excellence in subcontractor performance and flow-down of all applicable requirements to 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 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 226.1, Implementation of Department of Energy Oversight Policy.

(2) Development and Maintenance of Safety Documentation

The Contractor shall comply with the safety basis requirements of 10 CFR 830 which require 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 major components of the safety basis for a nuclear facility include the Documented Safety Analysis, the Technical Safety Requirements, and an Unreviewed Safety Question process. The Contractor shall be responsible for implementing a program to address these requirements.

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 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 maintenance of 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;
 - Geotechnical engineering to include maintenance of the existing SRS Landmark database of geotechnical data;
 - 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;
 - Establish and maintain a 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;
 - Construction and fabrication services for both 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 perform the following for its activities and for other activities as directed by the CO:
- Establish and implement a Conduct of Engineering and Construction program;
 - Establish and maintain engineering and construction standards;

- Ensure all customer/engineering/construction interfaces and requirements are properly reflected in designs;
- Provide 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
- Include cost, technical, and schedule performance measures in subcontracts.

(c) Operations Support

The Contractor shall provide technical support for all its activities. These services include, but are not limited to:

- Maintaining infrastructure (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 and distribution;
- Nuclear materials safeguards and accountability;
- Emergency operations;
- Emergency preparedness and response (including coordination with outside agencies);
- Site training;
- Technical and analytical laboratory operations; and
- Safeguards and security (excludes physical security and law enforcement services).

(d) Business Services

The Contractor shall provide general planning, management and administrative services for all its activities. Business services include, but are not limited to:

- Strategic planning, program planning, and long and short range planning;
- Facility and site use planning;

- Procurement;
- Accounting, budgeting and financial management;
- Personnel administration;
- Labor relations;
- Employee concerns;
- Information resources management, development, and operation;
- Real and personal property management;
- Legal;
- Internal Oversight (internal audit and contracts audit);
- Public Affairs; and
- Other administrative services.

The Contractor shall sponsor and manage pension and other employee benefit plans in accordance with law. The selected offeror will be required to become the main sponsor with responsibility for management and administration of the Multiple Employer Pension Plan (MEPP) which has been developed for the site in accordance with law. The Contractor shall have responsibility for funding (or securing funding from co-sponsors), administering, and maintaining the qualified status of all pension and investment plans. This plan will provide the pension benefits for all incumbent contract employees assigned to this contract and for the Liquid Waste contract upon its award. Although the selected offeror will be the main sponsor of the MEPP, it will only be responsible for funding pension contributions for employees under the site M&O contract. The Liquid Waste contractor will also be a participating member or co-sponsor of the MEPP. The Liquid Waste contractor will be responsible for pension contributions for employees employed under the Liquid Waste contract.

C-4 WORK FOR OTHERS/TECHNOLOGY TRANSFER

The Contractor shall conduct the Work for Others program consistent with this contract and 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 the contract clause in Section I entitled “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.

C-5 INTERFACES WITH OTHER SITE USERS

The Contactor shall provide site landlord services to DOE, NNSA, DOE/NNSA contractors, and tenant entities engaged in onsite activities, as well as contractors and subcontractors to these entities, as directed by the CO. These services shall be provided in accordance with memoranda of understanding or other appropriate agreements. Services may be provided by the Contractor on a cost recoverable basis as approved by the CO.

The Contractor shall be responsible for interfacing and integrating activities with other site contractors and tenant entities consistent with DOE technical direction. Examples of such interfaces and providing of services may include but are not limited to:

- Coordination and integration of interface between Contractor and other DOE Contractor(s), and scheduling of work;
- Support DOE oversight of the safe accomplishment of other DOE Contractor(s) work under the Contractor's ISM System;
- Environmental permit coverage;
- Supply utility services, including steam, water, electricity, and sewage treatment;
- Receipt of wastes to waste storage facilities and systems;
- Access to existing communications capabilities;
- Site access, badges, training, and personnel security services; and
- Other interfaces as directed by DOE.