

PART I – THE SCHEDULE

SECTION C

STATEMENT OF WORK

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C-1 Introduction

The Contractor shall, in accordance with the provisions of this Contract, accomplish the missions and programs assigned by the Department of Energy (DOE) and manage and operate the Savannah River National Laboratory (SRNL or the Laboratory) located at the Savannah River Site (SRS) in South Carolina.

SRNL is one of DOE's multi-program National Laboratories. The Laboratory is a Federally Funded Research and Development Center (FFRDC) established in accordance with the Federal Acquisition Regulation (FAR) Part 35 and operated under this management and operating (M&O) contract, as defined in FAR 17.6 and DOE Acquisition Regulation (DEAR) 917.6.

Given that the assigned missions of the Laboratory are dynamic, this Statement of Work (SOW) is not intended to be all-inclusive or restrictive, but is intended to provide a broad framework and general scope of the work to be performed at the Laboratory during the term of the Contract. This SOW does not represent a commitment to, or imply funding for, specific projects or programs. All projects and programs will be authorized individually by DOE and/or other work sponsors in accordance with the provisions of this Contract.

The Laboratory supports DOE strategic goals in science and energy, nuclear security, and management and performance (including cleanup of nuclear legacy), in accomplishing the Department's mission. The Laboratory mission is to conduct basic and applied research and development (R&D) to advance scientific knowledge, to protect the Nation's energy resources, national security, environmental quality and human health, and to strengthen educational foundations and national economic competitiveness. DOE programs are carried out in partnership with other DOE National Laboratories, academia, government agencies, the international scientific community, and the private sector. The Contractor will seek to advance the frontiers of science and technology through broad interdisciplinary R&D programs that answer fundamental questions, solve technical problems (locally, regionally, nationally, and internationally), and support the development and application of technologies to address societal needs.

All work under this Contract shall be conducted in a manner that protects the environment and assures the safety, health, and security of employees and the public. This objective is to be accomplished by the Laboratory implementing a process that includes an Environmental Management System (EMS). In performing the Contract work, the Contractor shall implement appropriate program and project management systems to track progress and maximize cost-effectiveness of work activities; develop integrated plans and schedules to achieve program objectives, incorporating input from DOE and stakeholders; maintain sufficient technical expertise to manage activities and projects throughout the life of a program; utilize appropriate technologies and management systems to improve cost efficiency and performance; and maintain Laboratory facilities and infrastructure as necessary to accomplish assigned missions.

The Contractor shall conduct all work in a manner that optimizes productivity, and fully complies with all applicable laws, regulations, and terms and conditions of the Contract.

It is the Contractor's responsibility to develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing the mission of the Laboratory. DOE expects the Contractor to employ effective and efficient management structures, systems, and operations that maintain high levels of quality, safety and security in accomplishing the work required under this Contract, and that, to the extent practicable and appropriate, rely on national, commercial, and industrial standards that can be verified and certified by independent, nationally recognized experts and other independent reviewers.

C-2 Mission Areas

2.1 General

The Contractor shall furnish the necessary personnel, facilities, equipment, materials, supplies, and services (except those provided by the Government) to accomplish the SOW, and shall perform such requirements and work in a quality, timely, and cost-effective manner. The SOW under this Contract is comprehensive in that the Contractor is expected to perform all necessary technical, operational, and management functions to manage and operate SRNL and perform the DOE missions assigned to SRNL.

The Contractor shall evaluate the SRNL mission statement as part of the DOE Annual Laboratory Planning process, and update annually, as necessary. The Contractor shall define a long-range vision for SRNL. The long-range vision shall include how the Contractor will steward the core capabilities assigned to it by the Office of Environmental Management (EM); define a science strategy for the future with major initiatives; provide a vision for future User Facilities; outline a plan for Strategic Partnership Projects and use of laboratory resources; provide a laboratory vision from an infrastructure standpoint, identifying gaps to enable mission ready core capabilities, a clear plan to address those gaps, and how the Contractor will attract and retain talent; and maintain cost control and status those activities as part of the Annual Laboratory Planning process.

2.2 Department of Energy Research and Development Mission

SRNL's research and development missions and programs support the overarching mission of the DOE through efforts in fundamental science, energy and environmental sciences and technologies, and national security. The Contractor shall provide highly skilled staff supporting scientific discovery and multi-disciplinary efforts to rapidly translate scientific discoveries into applications in physical, biological, computational, and environmental sciences, and operate scientific user facilities. The Contractor shall support the Department's Science and Technology mission to sustain and nurture the Nation's science and technology enterprise, to support national goals in security, energy, environmental quality, human health and economic growth, and provide a significant resource for scientists world-wide to engage with Laboratory staff in accelerating the Nation's progress towards these goals.

Over the term of this Contract, the Contractor shall conduct a broad spectrum of R&D programs in DOE science, national security, environmental quality, and energy missions as assigned by DOE. The Contractor shall make its government-funded scientific and technical research results broadly available to the public, unless classified. The Contractor shall also provide technical advice and guidance to DOE in support of policy development, program planning, and other DOE activities as requested by DOE, and shall bring forward recommendations for new research and development programs designed to achieve DOE mission goals.

In keeping with its overall role as a multi-program National Laboratory, the specific research programs conducted and the overall mix of research at SRNL will change, as needed, over the Contract period with DOE changing mission needs, advances in science and technology, and other drivers.

As a multi-program laboratory with significant contributions toward environmental cleanup and a crucial role in the Nation's nuclear deterrent, SRNL provides the Department with a combination of infrastructure and capabilities in nuclear science and nuclear chemical processing that is not currently provided anywhere else in the DOE complex. SRNL's work is integral to the missions of DOE-EM, the National Nuclear Security Administration (NNSA), and other Federal agencies; performing R&D, supplying and sustaining unique competencies, and engaging the broader Science and Technology community in support of these missions. For NNSA, SRNL is the only technology provider for the SRS tritium processing and gas transfer system loading and testing; SRNL's competency is of critical importance to the effectiveness of the U.S. nuclear stockpile.

2.2.1 Environmental Management Mission Role

The Contractor shall provide science, technology, engineering, and deployment support to the DOE effort to aggressively clean up the environmental legacy of nuclear weapons development and production and Government-sponsored nuclear energy research. The Contractor shall provide science and technology expertise that enables site cleanup and closure decisions to have a sound, scientific basis. The Contractor shall expand the deployment of innovative technologies and practical solutions that substantially reduce lifecycle cost, accelerate schedule, and reduce risk to achieve optimal end states with DOE environmental cleanup.

The Contractor shall partner with EM sites and other National Laboratories to:

- Provide technical and engineering expertise to develop, test, and evaluate program approaches across the DOE Complex through decision analyses that reduce lifecycle costs;
- Develop and deploy innovative approaches and nuclear chemical process engineering and nuclear materials management to accelerate environmental cleanup missions and site closures; and
- Provide a sound technical basis for defining optimal and sustainable end states of sites.

The Contractor shall accelerate the deployment of tailored and innovative techniques or processes to advance EM cleanup mission objectives by:

- Developing strategic partnerships with academia, government agencies, and industry to develop, enhance, and sustain the

capabilities and competencies needed to: (a) expand the technology development pipeline; and (b) develop risk informed strategies to achieve optimal and sustainable end states; and

- Evaluating EM and Office of Legacy Management (LM) site data from across the complex to help optimize long-term treatment or monitoring strategies. Where appropriate, develop the technical basis for updating the regulatory framework with DOE, regulators, and other stakeholders.

The Contractor shall contribute to the development of the next generation of scientists/engineers in environmental cleanup/remediation technologies, to address gaps in the EM technical workforce skill sets by:

- Leading the EM Minority Serving Institutions Partnership Program to expand and enhance post-doctoral and internship programs; and
- Developing and expanding partnerships with universities and academic institutions to better leverage programs in key competency areas.

2.2.2 National Security Mission Role

In supporting the national security mission, the Contractor shall advance DOE efforts that support the nuclear deterrent, reduce global nuclear threats, respond to nuclear/radiological incidents and accidents, and expand scientific knowledge and application to execute NNSA and DOE missions and strategic objectives. Contributions to the national security mission include:

- Supporting a robust nuclear weapons stockpile through support to the weapon design agencies for reservoir development and testing of components to ensure stockpile safety and reliability;
- Performing tritium R&D and providing technical support to the tritium mission for extracting new tritium from irradiated rods, delivering limited life component exchange products and gas transfer system surveillance data, and recovering helium-3;
- Developing nuclear proliferation detection and security technologies;
- Supporting permanent threat reduction by facilitating the conversion, removal, and disposal of excess weapons-usable nuclear material from both foreign and domestic stockpiles;
- Supporting processing and isotope recovery from Mk-18A target assemblies stored at the SRS;
- Developing, operating, and maintaining mobile capabilities (e.g., the Mobile Plutonium Facility and the Mobile Melt Consolidate system) and teams that are globally deployable to carry out the characterization, stabilization, treatment, and packaging of plutonium and other materials as appropriate;

- Providing technical assistance on the development of non-highly enriched uranium-based molybdenum-99 production technologies;
- Providing technical support to the Savannah River Plutonium Processing Facility project and the pit production mission through technology evaluation, training and workforce development, and interfacing with Los Alamos National Laboratory and Lawrence Livermore National Laboratory as the Weapons Design Agencies on processes and product quality;
- Conducting technical reviews of chemical, biological, and nuclear related licensing and interdiction cases and supporting export control related curriculum development and training workshops, both domestically and internationally;
- Providing timely technical and policy analysis on nonproliferation issues in support of DOE's implementation of high-level nonproliferation initiatives;
- Maintaining technology and technical expertise required for U.S.-led, on-site verification and monitoring of foreign nuclear material production activities, including for short-notice, real-time requests; and
- Supporting NNSA's counterterrorism and counterproliferation missions through R&D; analytical operations; and making personnel available for training, exercises, and responses to nuclear/radiological incidents and accidents.

2.2.3 Science Mission Role

The Contractor shall deliver the fundamental scientific knowledge and discoveries to advance the frontiers defined by EM and EM's support for the DOE Office of Science core capabilities. The Contractor shall translate those discoveries into contributions to the DOE Science Strategic Objectives of delivering the scientific discoveries and major scientific tools that transform our understanding of nature and strengthen the connection between advances in fundamental science and technology innovation.

The Contractor shall support the Office of Science research portfolio as it expands in the future at SRNL, which includes:

- Advanced Scientific Computing Research, to include high performance computing and data analytics
- Basic Energy Sciences
- Biological and Environmental Research
- Fusion Energy Sciences
- High Energy Physics
- Nuclear Physics

Although not limited to the following identified areas, the Office of

Science is particularly focused on possible expansion into:

- Fusion materials and neutron science
- Isotope processing and unique opportunities to harvest new medical isotopes from spent fuel inventory
- Environmental ecology/watershed, including environmental observational capabilities
- Materials and chemical science, including novel separations science
- Atmospheric modeling at local scales
- Cybersecurity

2.2.4 Energy Security Mission Role

The Contractor shall support DOE mission objectives for energy security to: (a) Advance the DOE goals and objectives by supporting prudent development, deployment, and efficient use of “energy strategies” that also create new jobs and industries; and (b) Support a more economically competitive, environmentally responsible, secure and resilient U.S. energy infrastructure.

Specifically, the Contractor shall support the multi-program research portfolio as it expands in the energy security area in the future at SRNL, which includes:

- Supporting DOE on procurement for design and construction of the Advanced Manufacturing Collaborative (AMC) facility on the campus of the University of South Carolina – Aiken. When completed, the Contractor shall operate the AMC facility, accessible by academia and industry, to develop and deploy innovative advanced manufacturing solutions that reduce costs, shorten schedules and increase the safety of DOE-EM and NNSA missions. The Contractor shall also operate AMC to support the DOE secure energy missions and the long-term sustainability of the U.S. manufacturing sector;
- Providing innovative solutions to increase electrical network security, reliability and resiliency by advancing the Laboratory’s regional partnerships (e.g., with Clemson University’s e-Grid) in order to provide cyber-physical solutions to secure the Nation’s electric grid; and
- Integrating energy technology for a variety of platforms and systems, for renewable energy technologies and national security applications in order to advance our nation’s competitiveness in a global marketplace.

2.2.5 Legacy Management Mission Role

The Contractor shall contribute to LM science and technology needs through the Network of National Laboratories for Environmental Management and Stewardship that SRNL leads, including:

- Optimizing long term monitoring and surveillance, which includes monitoring of groundwater and surface water contaminants that may remain at the site, as well as inspection and evaluation of cells, landfills, and other waste disposal sites; and
- Developing more cost effective and efficient groundwater treatment systems for completing remediation.

Particularly for subsurface monitoring, the Contractor shall support LM in transitioning from point measurements to monitoring strategies that provides more real time data for demonstrating compliance and that also integrates evaluation of remedy performance and behavior of the natural systems.

In addition, the Contractor shall address how remedies at sites involving long-lived radionuclides are resilient to climate variability, changing land and resource use.

2.3 FFRDC Research and Development Mission

The Secretary of Energy has authorized SRNL to operate as an FFRDC established in accordance with FAR Part 35 and operated under this M&O contract, as defined in FAR 17.6 and DEAR 917.6. DOE is committed to providing the appropriate use of SRNL assets for the benefit of other Federal agencies, private companies, universities, state and local institutions, and international entities within the limits set by DOE policy. The Contractor shall submit a Laboratory-Directed Research and Development (LDRD) Program Plan for approval by DOE to conduct a LDRD program that encourages its multidisciplinary capabilities and apply its expertise to conduct research for the government and the private sector through Strategic Partnership Projects (SPP), Cooperative Research and Development Agreements (CRADAs) and Agreements to Commercialize Technology (ACT).

2.3.1. Strategic Partnership Projects (Non-Department of Energy Funded Work)

The Contractor shall develop and maintain a strategic approach to managing and expanding the SPP portfolio to assist Federal agencies and non-Federal entities in accomplishing goals that may otherwise be unattainable (access to highly specialized or unique facilities, services or technical expertise) and to avoid duplication of effort at Federal Facilities; increase R&D interactions to transfer technology originating at the Laboratory to industry for further development or commercialization; and maintain core capabilities and enhance the science and technology base at

the Laboratory. SPP work shall be consistent with or complementary to the missions of DOE and the Laboratory.

2.3.2. Cooperative Research and Development Agreements

The Contractor shall use CRADAs consistent with the terms of this Contract to facilitate the commercialization of technology, optimize resources, and protect the Government, the Contractor and the CRADA participant (s) involved.

2.3.3. Agreements to Commercialize Technology

The Contractor may conduct privately-sponsored research at the Contractor's risk for third parties. In performing ACT work, the Contractor may use staff and other resources associated with this Contract for the purposes of conducting research and furthering the DOE technology transfer mission in accordance with the terms of this Contract.

2.4 University, Research Institutions, Industry and International Collaboration Efforts and Other Programs

The Contractor shall establish partnerships with universities, research institutions, industry, and international institutions. The purpose of these efforts will be to build on the scientific knowledge of the institution, create through collaboration efforts and solutions to scientific challenges and develop technologies that can be placed into the commercial sector to benefit the Nation.

2.4.1 Cooperation with Universities and Other Research Institutions/Outreach Programs

The Contractor shall also manage and operate programs for cooperation/outreach programs with academic and educational communities and with nonprofit research institutions for the purpose of promoting research and education in scientific and technical fields of interest to DOE programs. Such cooperation and outreach programs with academic and nonprofit research institutions may include, but are not limited to:

- Joint appointments;
- Establishment and operation of joint graduate programs with domestic universities; and
- Joint programs and/or institutes with universities in priority areas of science.
- Joint experimental programs with colleges, universities, and nonprofit research institutions;
- Interchange of college and university faculty and Laboratory staff;
- Student/teacher educational research programs at the pre-collegiate and collegiate level;
- Post-doctoral programs;
- Arrangement of regional, national, or international professional

- meetings or symposia;
- Use of special Laboratory facilities and expertise by colleges, universities, and nonprofit research institutes; or,
- Provision of unique experimental materials and expertise to colleges, universities, or nonprofit research institutions or to qualified members of their staffs.

2.4.2 International Research Collaboration and Cooperation

In accordance with applicable policies, the Contractor shall maintain a broad program of international research collaboration in areas of research interest to the Federal government. This collaboration will be both in areas where the Federal government has formal international cooperation agreements which assign the Contractor a specific role, as well as in areas of general interest to the Federal government's research programs.

2.4.3 Technology Transfer with Industry

The Contractor shall contribute to technological competitiveness through research and development partnerships with industry that capitalize on the Contractor's expertise and facilities. Principal mechanisms to effect such contributions are: cooperative research and development agreements, access to user facilities, reimbursable work for non-DOE activities, personnel exchanges, licenses, and subcontracting.

The Contractor shall cooperate with industrial organizations to assist in increasing U.S. industrial competitiveness, by assisting in the application of science and technology. Such cooperation may include, when appropriate, an early transfer of information to industry by arranging for the active participation by industrial representatives in the Contractor's programs. Cooperation with industrial partners and entities may include long-term strategic relationships aimed at commercialization of inventions or the improvement of industrial products. The Contractor shall respond to specific near-term technological needs of industrial companies with special emphasis given to working with small businesses, veteran-owned small businesses, service-disabled veteran-owned small businesses, historically under-utilized business zone small businesses, small disadvantaged businesses, and women-owned small businesses.

The Contractor shall develop productive relationships with regional and local companies through forums such as conferences, workshops, and traveling presentations. It is anticipated that these organizations will be particularly effective participants in the Laboratory's technology transfer activities in promoting a mutually beneficial relationship between DOE and the communities surrounding the Laboratory.

Cooperation may also include use by industrial organizations of Laboratory facilities and other assistance as may be authorized, in writing,

by the Contracting Officer. The Contractor is also encouraged to engage in strategic collaborations with domestic industry that maintain SRNL capabilities and further small business development.

2.4.4 Other Programs:

The Contractor shall be responsible for the conduct of such other programs and activities as the Parties may mutually agree, including:

- (i) Providing the facilities of the Laboratory to the personnel of public and private institutions for the conduct of research, development, and demonstration work, either within the general plans, programs and budgets agreed upon from time to time between DOE and the Contractor, or as may be specifically approved by DOE. The Laboratory facilities shall be made available on such other general bases as DOE may authorize or approve.
- (ii) The conduct of R&D work for non-DOE sponsors which is consistent with, and complementary to, DOE's mission and the Laboratory's mission under the Contract, and does not adversely impact or interfere with execution of DOE-assigned programs, does not place the facilities or Laboratory in direct competition with the private sector and for which the personnel or facilities of the Laboratory are particularly well adapted and available, as may be authorized, in writing, by the Contracting Officer.
- (iii) The dissemination and publication of unclassified scientific and technical data, as well as operating experience developed in the course of the work.
- (iv) Furnishing such technical and scientific assistance (including training and other services, material, and equipment), which are consistent with, and complementary to, the DOE's and Laboratory's mission under this Contract, both within and outside the United States, to the DOE and its installations, contractors, and interested organizations and individuals.

2.5 SRNL Regional and Community Involvement

The Contractor shall support local and regional economic development and apply existing Laboratory assets in the execution of such support. The Contractor shall also promote SRNL within the local and regional communities.

The Contractor shall create opportunities to educate and train future generations of scientists, engineers, and innovators to support DOE workforce development and science, technology, engineering and mathematics (STEM) education efforts.

2.6 Operating Envelope

The Contractor shall achieve assigned objectives in a manner that is safe, secure, legally and ethically sound, as well as fiscally responsible. The operating envelope, including the nuclear safety envelope for SRNL, is limited to work authorized by DOE by authorization agreements, individual project approvals or through letters of direction, using approved work locations, and conducted in accordance with the approved SRNL Integrated Safety Management System and Safeguards and Security Management Plan.

2.6.1 SRNL Work Locations and Expectations

SRNL facilities may include Government-owned or leased facilities as well as approved Contractor leased facilities at such other locations as may be approved by DOE for use under this Contract. Subject to mutual agreement, other facilities may be used in the performance of the work under this Contract (e.g., Contractor-owned or Contractor-leased facilities) as approved by the Contracting Officer.

R&D work performed outside approved work locations (i.e. off-site) shall be reviewed and assessed for hazards, risks, application of appropriate mitigating controls and, as necessary, briefing of DOE Savannah River Operations Office (SR) personnel prior to the initiation of work.

The Contractor shall perform overall integrated planning, acquisition, upgrades, and management of Government-owned, leased, or controlled facilities and real property accountable to SRNL. The Contractor shall employ an integrated management approach for management and utilization of SRNL facilities and infrastructure to support DOE missions.

The Contractor shall employ facilities management practices that are integrated with mission assignments and business operations. The maintenance management program shall maintain facilities, equipment and materials in a manner that:

- Promotes and improves operational safety, environmental protection and compliance, property preservation, and cost effectiveness;
- Ensures protection of life and property from potential hazards, continuity and reliability of operations, and fulfillment of program requirements; and
- Ensures the condition of the assets will be maintained or improved to meet the DOE mission.

For all Federal and non-Federal facilities, DOE-SR Manager approval must be obtained prior to (1) the use of any radioactive material other than certified sealed radioactive sources, that may potentially contaminate the structure or systems (e.g., ventilation) of a facility outside an engineered

confinement barrier; or (2) any planned activity that may introduce residual contamination from hazardous materials (e.g., beryllium, crystalline perchlorates, hexavalent chromium, nanoparticles, biological agents) that may potentially contaminate the structure or systems (e.g., ventilation) of a facility outside an engineered confinement barrier.

2.6.2 Hazards/Risks

The Contractor shall conduct risk evaluations (e.g., institutional/reputational, environment, safety, health or business risks and legacy considerations created by the acceptance of work under this Contract) at all levels in accordance with applicable DOE Orders. All proposed work shall clearly identify risks and legacy considerations as part of the work authorization package along with justification for performing the work and controls that will be instituted to mitigate the risks and legacy considerations and where necessary the approvals required to initiate the work. Work shall be conducted on the SRNL campus and any satellite campuses with protection of the public and environment in mind, such that higher risk activities are conducted with the greatest buffer and separation practical.

The Contractor shall not conduct research with biological agents that exceed biosafety level II or involve Tier I select agents without prior DOE-SR Manager approval.

DOE maintains its right to not authorize the proposed work based upon analysis of the hazards/risks and legacy considerations involved.

2.6.3 Safeguards and Security

- (a) The Contractor shall obtain all safeguards and security (S&S) services from the SRS M&O contractor utilizing a Functional Service Agreement executed per the processes described in Section H Clause entitled, *Site Services and Interface Requirements Matrix* and Section J, Attachment J-7 entitled, *Site Services and Interface Requirements Matrix*, Appendix C, section 15. The Contractor shall utilize the SRS M&O contractor policies, procedures and manuals to ensure compliant execution of the S&S program in order to promote consistency across the Site and to ensure safety, security, and cost effectiveness.
- (b) Baseline services include, but are not limited to, the following:
 - (1) Program Planning and Management
 - (2) Physical Protection Systems
 - (3) Material Control and Accountability
 - (4) Information Security
 - (5) Personnel Security
 - (6) Cyber Security
- (c) Protective force services will be provided by the SRS Protective Force Contractor through the DOE Savannah River Operations Office.

C-3 Performance Expectations, Objectives, and Measures

3.1 Core Expectations

3.1.1 General

The relationship between DOE and its National Laboratory M&O contractors is designed to bring best practices for R&D to bear on DOE missions. Through application of these best practices, DOE seeks to assure programmatic and operational performance of today's research programs and the long-term quality, relevance, and productivity of the laboratories against tomorrow's needs.

Accordingly, DOE has substantial expectations of the Contractor in the areas of: program delivery and mission accomplishment; laboratory stewardship; and laboratory operations and financial management.

3.1.2 Program Delivery and Mission Accomplishment Expectations

The Contractor is expected to provide effective planning, management, and execution of assigned R&D programs. The Contractor shall execute assigned programs so as to strive for the greatest possible impact on achieving DOE mission objectives, to aggressively manage SRNL science and technology capabilities and intellectual property to meet these objectives, and to bring forward innovative concepts and research proposals that are well-aligned with DOE missions. The Contractor shall propose work that is aligned with, and likely to advance, DOE mission objectives, and that is well matched to Laboratory capabilities. The Contractor shall strive to meet the highest standards of scientific quality and productivity, "on-time, on budget, as-promised" delivery of program deliverables, and first-rate service to the research community through user facility operation.

3.1.3 Operating Principles

The Contractor is accountable for providing reasonable assurance to DOE that the SRNL system of management controls, when properly implemented, provides an effective and efficient means of meeting all applicable requirements while accomplishing assigned missions.

To provide reasonable assurance, the Contractor shall identify, monitor, and address existing and/or emerging risks important to the accomplishment of SRNL mission and Contract requirements.

Laboratory management shall provide and report in a timely manner performance data to Governance processes, which ultimately provide assurance to DOE.

The Contractor shall be responsible for penalties and fines arising from

work conducted by Contractor management or staff in furtherance of Contract objectives which is not authorized under the terms and conditions of the Contract, or is inconsistent with local, state, or federal laws or guidelines. DOE shall not be liable for special, consequential, or incidental damages attributed to such actions.

3.1.4 Laboratory Stewardship Expectations

The Contractor shall be an active partner with DOE in assuring that SRNL is renewed and enhanced to meet future mission needs. Within the constraints of available resources and other Contract requirements, the Contractor, in partnership with DOE, shall:

- (a) Maintain a laboratory vision and long-term strategic plan to meet anticipated DOE and national needs.
- (b) Attract, develop, and retain an outstanding work force, with the skills and capabilities to meet DOE evolving mission needs.
- (c) Renew and enhance research facilities and equipment so that SRNL remains mission ready and is well-positioned to meet future DOE needs.
- (d) Build and maintain a financially viable portfolio of research programs that generates the resources required to renew and enhance Laboratory research capabilities over time.
- (e) Maintain a positive relationship with the broader research community, to enhance the intellectual vitality and research relevance of SRNL, and to bring the best possible capabilities to bear on DOE mission needs through collaborative relationships with the research community.
- (f) Build a positive, supportive relationship founded on openness and trust with the community and region in which SRNL is located.

3.1.5 Administration and Operation of the Laboratory

The Contractor shall manage, operate, protect, maintain and enhance the Laboratory's ability to function as a DOE Laboratory, provide the infrastructure and support activities, support the accomplishment of the Laboratory's missions, and assure the accountability to DOE under the results-oriented, performance-based provisions of this Contract. The Contractor shall implement a broad scope continual self-assessment process to assess the overall performance in, and drive continuous improvement of, Laboratory operations and administration. Additionally, the Contractor shall provide all necessary support for a smooth Contract transition at the end of the Contract period.

- (a) **Strategic and Institutional Planning.** The Contractor shall conduct a strategic planning process and develop institutional business plans and strategic facility plans. The Contractor shall also consider DOE provided planning guidance and strategic

planning material to assure consistency with DOE missions and goals and with due regard for Environment, Safety, and Health (ES&H) issues.

(b) **Protection of Workers, the Public, and the Environment.** The safety and health of workers and the public, and stewardship of the environment, are fundamental responsibilities of the Contractor. Accordingly, the Contractor shall establish a process to integrate environmental, safety, and health processes that support the safe and efficient performance of all Laboratory work, and comply with health, safety, and environmental laws and regulations; minimizes wastes; and complies with DOE Directives. The process shall include an effective Environmental Management System and compliance with National Environmental Protection Act documentation requirements. The process shall be applied to all Contractor activities conducted by, or for, the Laboratory, through subcontractors or other entities, and shall provide for ES&H oversight of Laboratory and subcontractor operations.

(c) **Emergency Management.**

- (1) The Contractor shall obtain all Emergency Management Services from the SRS M&O contractor utilizing a Functional Service Agreement executed per the processes described in Section H, Clause entitled *Site Services and Interface Requirements Matrix* and Section J, Attachment J-7 entitled, *Site Services and Interface Requirements Matrix*, Appendix C, section 15. The Contractor shall utilize the SRS M&O contractor policies, procedures and manuals to ensure compliant execution of the Emergency Management program in order to promote consistency across the Site and help to ensure safety, security, and cost effectiveness.
- (2) Baseline services include but are not limited to, the following:
 - (A) SRS Operations Center operations;
 - (B) SRS Fire Department;
 - (C) Emergency Response Organization, including facilities and equipment;
 - (D) Facility emergency preparedness programs;
 - (E) Site and facility-level drills/exercises and assessments; and
 - (F) Training.

(d) **Cyber Security.**

- (1) The Contractor shall obtain all Cyber Security Services from the SRS M&O contractor utilizing a Functional Service Agreement executed per the processes described in Section H,

Clause entitled *Site Services and Interface Requirements Matrix* and Section J, Attachment J-7 entitled, *Site Services and Interface Requirements Matrix*, Appendix C, section 19. The Contractor shall utilize the SRS M&O contractor policies, procedures and manuals to ensure compliant execution of the Cyber Security program in order to promote consistency across the site and help to ensure safety, security, and cost effectiveness.

(2) Baseline services include but are not limited to, the following:

- (A) Information Security
- (B) Classification Program
- (C) Classified Matter Protection and Control (CMPC)
- (D) Controlled Unclassified Information (CUI)
- (E) Unclassified Controlled Nuclear Information (UCNI)

(e) **Laboratory Facilities.** The Contractor shall manage and maintain Government-owned facilities, both provided and acquired, to further national interests and to perform DOE statutory missions. SRNL facilities include facilities in the following Facility Hazard Categories: Nuclear, Category 2; Nuclear, Category 3; and less than Nuclear, Category 3. Recognizing that these facilities are a national resource, these facilities may also be made available, with appropriate agreements, to private and public sector entities including universities, industry, and local, state, and other government agencies. The Contractor shall perform overall integrated planning, acquisition, upgrades, and management of Government-owned, leased or controlled facilities and real property accountable to the Laboratory in accordance with Federal Government and DOE policies and directives as described in Section H clause entitled *Facilities* and Section H clause entitled *Real Property Asset Management*. The Contractor shall employ facilities management practices that are best-in-class and integrated with mission assignments and business operations. The maintenance management program shall maintain Government property in a manner that: (1) promotes and continuously improves operational safety, environmental protection and compliance, property preservation and cost effectiveness; (2) ensures continuity and reliability of operations, fulfillment of program requirements and protection of life and property from potential hazards; and (3) ensures the condition of the assets will be maintained or improved. The nuclear maintenance program shall be developed in accordance with DOE Order 433.1B *Maintenance Management Program for DOE Nuclear Facilities* and approved by DOE.

- (f) **Sustainability**. The Contractor shall assist DOE, through direct participation and other support, to achieve DOE's energy efficiency goals and objectives in electricity, water, and thermal consumption, conservation, and savings, including goals and objectives contained in current Executive Orders. The Contractor shall 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 Site Plan shall consider all potential sources of funds, in the following order: (1) the maximum use of private sector, third-party financing applied on a life-cycle cost effective basis, particularly from Energy Savings Performance Contracts and Utility Energy Services Contracts awarded by DOE; and (2) only after third-party financing options are exhausted, in the event that energy efficiency and water conservation improvements cannot be effectively incorporated into a private sector financing arrangement that is in the best interests of the Government, then DOE funding and funding from overhead accounts can be utilized.
- (g) **Waste Management**. The Contractor shall be responsible for investigations, monitoring, clean-up, containment, restoration, removal, decommissioning and other remedial activity (including any costs for defense of litigation related thereto), for the management and/or clean-up of oil spills, contamination or releases of any solid wastes, hazardous wastes and constituents, hazardous or radioactive substances, wastes or materials present in soil, groundwater, air, surface water, facilities and structures (whether subsurface or above ground), as a result of research or other work conducted by the Contractor during the term of the Contract.

The Contractor shall execute pollution prevention efforts to advance cost-effective waste reduction, environmental release reduction, environmentally preferable purchasing, and environmental sustainability in facility construction and operation, in all site operations and facilities covered by this Contract.

- (h) **Business Management**. The Contractor shall manage an effective integrated system of internal controls for all business and administrative operations of the Laboratory.

- (1) ***Human Resources Management.*** The Contractor shall have an HR system designed to attract and retain outstanding employees in accordance with DOE expectations, policies, and procedures. The Contractor shall maintain a market based system of compensation and benefit plans to motivate employees to achieve high productivity in scientific research and laboratory operation.

The Contractor also shall create and maintain a Laboratory environment that promotes diversity and fully utilizes the talents and capabilities of a diverse workforce. The Contractor shall seek to recruit a diverse workforce by promoting and implementing DOE and Laboratory goals. Special consideration will be given to Historically Black Colleges and Universities/Minority Serving Institutions as potential resource pools.

- (2) ***Financial Management.*** The Contractor shall maintain a financial management system responsive to the obligations of sound financial stewardship and public accountability. The overall system shall include an integrated accounting system suitable to collect, record, and report all financial activities; a budgeting system which includes the formulation and executions of all resource requirements needed to accomplish projected missions and formulate short-range and long-range budgets; an internal control system for all financial and other business management processes; and a disbursements system for both employee payroll and supplier payments. The internal audit group for the Laboratory shall report to the most senior governing body of the Contractor's parent organization(s).
 - (3) ***Purchasing Management.*** The Contractor shall have a DOE-approved purchasing system to provide purchasing support and subcontract administration. The Contractor shall, when directed by DOE, and may, but only when authorized by DOE, enter into subcontracts for the performance of any part of the research work under this Contract.
- (i) **Legal Services.** The Contractor shall maintain legal support for all Contract activities including, but not limited to, those related to patents, licenses, and other intellectual property rights; subcontracts; technology transfer; environmental compliance and protection; labor relations; and litigation and claims.

- (j) **Information Resources Management.** The Contractor shall maintain information systems for organizational operations and for activities involving general purpose programming, data collection, data processing, report generation, software, electronic and telephone communications, and computer security. The Contractor shall provide computer resource capacity and capability sufficient to support Laboratory-wide information management requirements. The Contractor also shall conduct a records management program.
- (k) **Self-Assessment Program.** The Contractor shall conduct an on-going self-assessment process that continually samples and validates actual program practice and prescribed DOE and Laboratory policies, standards, and procedures.
- (l) **Safety Culture.** The Contractor shall:
- (1) Adopt and continuously improve organizational culture (core values and behaviors), Safety Culture, and Safety Conscious Work Environment, including implementation and utilization of programs/processes that support employees raising concerns without fear of retaliation. These programs/processes include, but are not limited to the Employee Concerns Program, the Differing Professional Opinions Process; Ethics and Compliance Program/Process; and Alternative Dispute Resolution;
 - (2) Continuously promote a work environment where employees are encouraged to raise concerns. The Contractor shall define expectations, rigorously reinforce those expectations, and take actions to mitigate the potential for a chilling effect;
 - (3) Conduct business in a manner fully transparent to DOE. Activities are demonstrated by open, clear, and well-communicated management actions and technical and project documentation. Identified issues and trends are proactively shared with DOE;
 - (4) Champion a culture that promotes proactive self-identification and reporting of issues that identifies and addresses systemic weaknesses leading to sustained continuous self-improvement; and
 - (5) Champion a culture that emphasizes the following safety culture attributes:
 - (i) Leadership - Demonstrated safety leadership;
 - (ii) Employee/Worker Engagement – Participation in work planning and improvement; and
 - (iii) Organizational Learning – Performance monitoring through multiple means.

- (m) **Other Support.** The Contractor shall provide other administrative services necessary for Laboratory operations and logistics support to the DOE-SR as requested by the Contracting Officer.

3.1.6 Expectations for Program and Project Management for the Acquisition of Capital Assets

DOE Project Management Principles apply to all capital asset projects using a tailored approach as defined or approved by the sponsoring project office. Therefore, the Contractor shall comply with DOE Order 413.3B *Program and Project Management for the Acquisition of Capital Assets*.

3.2 Performance Objectives and Measures

The performance objectives and measures of this Contract are stated in the annual Performance Evaluation and Measurement Plan for the management and operations of the SRNL.

3.3 Management and Administrative Services

The Contractor shall provide management and administrative services required to execute the work scope as a standalone business entity from the management and operations of the SRS. This scope includes, but is not limited to:

- Executive Leadership and Management
- Public Affairs and Internal Communications
- Government and Community Relations
- Internal Audit and Contractor Assurance
- Procurement and Prime Contract Administration
- Operational Excellence / Continuous Improvement
- Strategic and Operational Planning
- Project Delivery
- Employee Concerns
- Freedom of Information Act (FOIA) actions

3.4 Interface Management

Interface management is a key Savannah River Site function for the effective and efficient delivery of services between multiple Site contractors. It is also an integral part of resolving issues involving various Site operations activities among contractors, promoting efficient mission accomplishment for EM and NNSA and ensuring Site policies and procedures are integrated to promote mission success. Interface management success is defined by the results that stem from two or more organizations working together to develop solutions within the parameters of their contracts. The role of interface management is to exchange services and solve issues in the best interest of the Government at the lowest level possible in the respective organizations.

The Contractor shall:

- (a) Establish interface agreements for all processes, as described in Section J, Attachment J-7, *Site Services and Interface Requirements Matrix* with the following exceptions. During transition, the Contractor may propose for DOE's approval, exceptions for self-performance of processes associated with business systems, procurement and asset management, human resources, classification responsibilities, public affairs, employee concerns, radiation protection program, and quality and operations excellence. Agreements, processes, and associated work schedules as relates to Interface Management shall be executed per Section H, Clause entitled, *Site Services and Interface Requirements Matrix*; and Section J, Attachment J-7, *Site Services and Interface Requirements Matrix*.
- (b) Participate in the maintenance of the SRS Interface Management Plan by membership on the Interface Management Team.
- (c) Along with other Site contractors, make every effort to improve mutual understanding and cooperation and to seek resolutions in the best interest of the Government and SRS mission completion, as opposed to an individual contractor's best interest;
- (d) Appropriately document, execute, and manage interfaces and agreements made with other Site contractors, in accordance with Section J, Attachment J-7, *Site Services and Interface Requirements Matrix*; Section H Clause entitled, *Site Services and Interface Requirements Matrix*; and other documented interfaces. Interface agreements shall detail the scope of the interface, including boundaries and constraints, standard and special service circumstances as well as any nuclear safety, quality assurance and quality control, health, safety, Site access, schedule concerns, and/or environmental protection requirements;
- (e) Generate new interface agreements as may be necessary during this Contract to support Laboratory operations;
- (f) Work with other Site contractors in generating agreements in order to support working relationships;
- (g) Work with other Site Contractors to develop service agreements with sufficient detail for DOE to determine whether the task is consistent with customer baselines and represents a reasonable use of resources;
- (h) Provide input to the SRS M&O contractor to support development and maintenance of the interface management processes and storage of the interface agreements; and
- (i) At least yearly, review the interface agreements established during transition and propose any changes in the best interest of the Government, the Laboratory and Site mission activities. During the remainder of the Contract, review and propose changes as needed.