SECTION J
APPENDIX A

STATEMENT OF WORK

Department of Energy, National Nuclear Security Administration
Savannah River Site
Management and Operation

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CHAPTER I. OBJECTIVES, SCOPE, AND REQUIREMENTS

1.0 Objective

Savannah River Site (SRS) provides capability for supporting the enduring nuclear weapons stockpile, processing and storing nuclear materials in support of U.S. nuclear non-proliferation efforts, environmental management cleanup, and developing and deploying technologies to support site cleanup. The National Nuclear Security Administration (NNSA) is the landlord for the SRS and is responsible for supporting the nuclear weapons stockpile programs and nonproliferation activities on the Site. The Department of Energy's (DOE) Office of Environmental Management (EM) is 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 is operated by a separate Management and Operating (M&O) contractor.

This statement of work (SOW) includes six Contract Line-Item Numbers (CLINs). CLIN 0001 covers Contract transition. CLIN 0002 covers the NNSA Management and Operation of the SRS. CLIN 0003 covers Non- NNSA Management and Operations. CLIN 0004 and its Sub-CLINs cover NNSA Capital Construction. CLIN 0005 and its Sub-CLINs cover Environmental Management Capital Construction projects. CLIN 0006 covers Strategic Partnership Projects (SPP).

This Contract will fully support the DOE and NNSA Strategic Vision and NNSA's management of a fully integrated, interdependent, and effective Nuclear Security Enterprise (NSE), consisting of all eight NNSA sites. It will also support the ongoing EM mission work at SRS. The Contract will ensure these outcomes by achieving the following eight specific strategic objectives:

- Meeting annual established deliverables/requirements while also identifying ways to improve site performance and gain operational efficiencies in the overall completion of national security missions for nuclear production operations including tritium and plutonium operations; and supporting nonproliferation and counterproliferation activities requiring SRS facilities and capabilities;

- Modernizing and maintaining site infrastructure to ensure near- and long-term reliable production operations and improving performance of infrastructure project planning and execution;

- Developing and deploying new technologies, processes, and procedures to reduce risk to mission delivery;

- Recruiting, developing, training, and retaining the workforce and leadership cadre necessary to complete the work at SRS in both the short- and long-terms;

- Delivering on complete mission and project portfolio while implementing efficiencies that accelerate schedule and reduce cost;

- Identifying and supporting actions that continue to improve the integration required for the DOE/NNSA enterprise to enable success for the SRS mission(s);

- Execute clean-up mission including but not limited to deactivation and decommissioning of legacy facilities constructed in support of industrial operations, common infrastructure systems, and past nuclear materials production, such as the 235-F Plutonium Processing Facility, C/K/L Reactors; and

- Reduce risks and protect the environment and community through ongoing environmental remediation programs and systems.

2.0 Background

2.1 The NNSA Mission

The NNSA, established by Congress per the NNSA Act (Title XXXII of the National Defense Authorization Act for Fiscal Year 2000, Public Law 106-65) as a semiautonomous element within DOE, is responsible for the management and security of the nation's nuclear weapons, nonproliferation, and naval nuclear propulsion programs. It also responds to nuclear and radiological emergencies in the United States and abroad, and NNSA federal agents provide safe and secure transportation of nuclear weapons, components, and special nuclear materials.

2.2 The NNSA Organization

NNSA consists of multiple mission offices - the Offices of Defense Programs; Defense Nuclear Nonproliferation including the Nuclear Counterterrorism and Incident Response Program; Naval Reactors; Office of Infrastructure; Defense Nuclear Security - and various mission support offices such as the Offices of Policy; Partnership and Acquisition Services; Environment, Safety, and Health; Information Management; Cost Estimating and Program Evaluation; Congressional and Intergovernmental Affairs; Communications; and Management and Budget. These offices work closely with NNSA Field Offices to execute and oversee the NNSA mission across the National Security Enterprise (NSE) which includes the various site and headquarters locations.

NNSA relies on M&O contractors to manage day-to-day site operations and to adhere to its policies when operating its laboratories, production plants, and other facilities in the NSE. Together, the M&O contractors implement NNSA's wide-ranging mission goals including the Stockpile Stewardship Program managed by Defense Programs, which comprises operations associated with logistics, surveillance, assessment, maintenance, surety, refurbishment, modernization, manufacture, and dismantlement of the nuclear weapons stockpile as well as research, development, qualification, and certification efforts; and the nuclear nonproliferation, counterterrorism, and counterproliferation programs managed by

NA-20 and NA-80 respectively to include activities to minimize the need for, presence of, or production of weapons-usable nuclear material across the world and monitoring and verification in support of arms control and nuclear incident response.

2.3 Principal Location of Performance

The work under this Contract is to be carried out at the SRS which is a 310-square mile site containing a multitude of federal industrial and nuclear facilities located in Aiken, Allendale, and Barnwell Counties in South Carolina.

3.0 Scope

The objective of this Contract is to perform all necessary operational, coordination, and management functions required to support the NNSA and broader national security missions assigned to the SRS. This includes but is not limited to all ongoing missions (e.g., defense and nonproliferation programs), projects (e.g., infrastructure modernization), and functions (e.g., safety, security, cyber security, etc.), as well as those that may be assigned during the term of the Contract. It further includes all infrastructure management and maintenance; information technology and state-of-the-art cybersecurity protocols and applications; human resource management including critical skills recruitment, training, and retention; environmental and waste management; emergency management, health, safety, security systems; safeguards; and purchasing and other administrative systems.

In the execution of this Contract, and particularly program integration, the Contractor shall meet rigorous quality, reliability, safety, and security standards essential for the U.S. nuclear deterrent; maintain sufficient production capability and capacity necessary to produce at rates defined in NNSA directive and planning documents; and implement flexible and resilient production management and execution processes to accommodate a dynamic national security environment. The Contractor shall balance risk management and lifecycle cost reduction to provide optimized value to the Government. This includes leveraging commercial practices to reduce risk and improve mission delivery. This applies both internally to this Contract and contributing to the overall cost efficiency of the NSE.

The Contractor shall be fully responsible and accountable for the safe, reliable, and secure accomplishment of all work meeting mission requirements regardless of the location of performance, whether performed by its own personnel or team members, subcontractors, staff augmentation, Inter-Entity Work Order, or other agreement or arrangement. The Contractor shall be responsible for performance of analyses requested by Program offices, planning and coordinating production and modernization schedules; integrating, managing and executing the programs; supporting and executing large and small projects; working collaboratively with National Laboratories to develop and deploy modern and essential technologies and capabilities; and completing operations and other activities as described in this SOW and Work Authorizations issued by the Contracting Officer.

3.1 Financial Management

The Contractor shall support the DOE/NNSA Planning, Programming, Budgeting and Evaluation (PPBE) process. In supporting PPBE, the Contractor shall provide financial data, or be integrated with Government systems, such as:

- Standard Accounting and Reporting System (STARS)
  - STARS information is provided under the Institutional Cost Reporting Categories
- iMANAGE
  - Budget Data and Information Systems. The budget information shall be collected in accordance with theWork Breakdown Structure (WBS) (see Section J, Appendix R)
- Facilities Information Management System (FIMS) and/or BUILDER
- NNSA Integrated Data Warehouse (IDW)
- Integrated Planning, Accountability and Budgeting System (IPABS)

The Contractor shall maintain financial cost reporting systems to provide detailed cost reports for cost, scope, and schedule for direct and indirect costs for all work performed under this Contract. The cost reports shall include labor costs, leave/hours not worked, staff augmentation, fringe, pension, legacy, materials, services-subcontractors, direct service centers, other expenses, capital, labor category, and full-time equivalent (FTE) resource usage for all direct and indirect costs and utilize cost benefit analyses to determine the appropriate level of support functions and risks. The Contractor shall provide NNSA and DOE EM transparency and review access into those financial cost reporting systems and shall provide routine reports to allow NNSA and EM visibility into program and cost management supporting reports to external sources (see Section J, Appendix O, *Program Management and Cost Reports*). The Contractor's financial cost reporting systems shall support the systems listed above, as well as other Government systems as they are identified or developed and implemented.

In accordance, with Section F-7 of the Contract, an Annual Controlled Baseline (ACB) framework and the ACB submission shall be provided for approval. In accordance with Section B-8 of the contract, for subsequent fiscal years, the Contractor shall develop for approval an ACB for all Contractor direct programs and indirect support costs.

The Contractor shall have in place systems and tools to: (1) manage mission and indirect changes in scope, cost, and schedule; (2) compare actual cost of work performed (ACWP) to budgeted cost of work performed (BCWP) and budgeted cost of work scheduled (BCWS); (3) accurately forecast estimate to complete (ETC) and estimate at completion (EAC); and (4) document deviations from the baselines described above in this paragraph and, on a timely basis, notify the Contracting Officer of such changes. Changes shall be minimal and limited to changes outside the Contractor's control. The Contractor shall not make retroactive changes to records pertaining to work performed that will change previously-reported costs, except for correction of errors and routine accounting adjustments and shall not make retroactive changes for funding fluctuations or revisions in EAC.

3.2 Enterprise Success

The Contractor shall participate with NNSA and other NNSA M&O contractors in

developing, evaluating, planning, and implementing strategic initiative activities that optimize mission and business operations across the NSE. The goal of these initiatives is to increase the overall efficiency and cost effectiveness of the NSE from a business and mission perspective, to include:

- Improve site operations efficiency;
- Improve work practices that benefit SRS and other NNSA sites;
- Reduce administrative costs and lead times for both the Contractor and the DOE/NNSA;
- Innovate and collaborate to improve products and delivery methods; and
- Recruit, retain, train, and develop the workforce and leaders required for short- and long-term enterprise success.

NNSA expects these and other initiatives to result in operational improvements, increased resiliency, and efficiency gains within the NSE.

The Contractor shall team with the other NNSA and NSE contractors in identifying potential cross-NSE benefits to be derived from sharing lessons learned, benchmarking, and best practices in the areas of mission and enterprise functional support.

4.0 Administrative and Technical Requirements

4.1 Integrated Safety Management (ISM), Integrated Safeguards and Security Management (ISSM), Environmental Management System (EMS), and Quality Assurance Systems (QAS)

The Contractor shall ensure that ISM, ISSM, EMS, and QAS are integrated into its operations and that its Contractor Assurance System (CAS) accurately reflects timely and relevant Contractor integrated performance data. The Contractor shall use the integrated performance data to improve operations and prevent operational incidents.

4.2 Work Authorization (WA) System

Specific work requirements under this Contract will be established annually and updated as needed by the Contracting Officer in accordance with the applicable DOE Order, NNSA Supplemental Directive 412.1, and the Contract's Section I Clause entitled "DEAR 970.5211-1, *Work Authorization*."

4.3 Information Technology (IT)

The Contractor is responsible for the acquisition, development, operation, maintenance, and disposal of federal IT, including national security systems (NSS), information systems, and operational technologies (herein generally referred to as information resources) on both classified and unclassified networks. The Contractor shall ensure these information resources conform with applicable federal statutes, regulations, and policies.

The Contractor must balance the need for information resources that meet mission and

business requirements while also efficiently using government resources. The Contractor must develop and implement information resources plans and architectures to maintain a modern computing environment for SRS. The Contractor must prioritize cross-NSE interoperability and collaboration and is encouraged to do the same with other relevant mission partners. These plans shall include, but are not limited to, the implementation of integrated manufacturing-based information systems that support NSE production, Special Nuclear Materials (SNM) accountability, production scheduling and flow, surveillance, process knowledge archiving, and preservation of production and certification records across multiple NSE sites. The Contractor is encouraged to leverage existing commercial and government services to the extent practicable.

The Contractor should develop network modernization plans to fully implement Internet Protocol version 6 (IPv6), according to FAR 11.002(g), and Personal Identity Verification requirements, according to FAR 4.13.

The Contractor shall establish an IT Governance Review Board for the review and approval of IT acquisitions and procurements according to DOE Orders and NNSA guidance. The IT Governance Review Board, in coordination and under the guidance of the Contractor Chief Information Officer (CIO), must ensure that Federal IT Portfolio Management processes, procedures, and reporting requirements are met and that IT procured by the Contractor shall be appropriately identified, coded, and accounted for in the Kansas City National Security Campus (KCNSC) Supply Chain Management Center (SCMC) reporting. The Contractor will adhere to the oversight and recommendations provided by the NNSA Investment Review Board (IRB).

The Contractor shall establish policy and procedures to implement the Federal Information Technology Acquisition Reform Act (FITARA) Framework and requirements outlined by the Office of Management and Budget (OMB) Memorandum, M-15-14: Management and Oversight of Federal Information Technology.

The Contractor, prior to using any Contractor- or Parent-owned software and systems where reimbursement is expected, shall request approval by the Contracting Officer.

The Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license by or for the Government, in any Contractor-owned software and systems brought in and used. Said license shall be limited to the continued NSE production work by successor contractors. Until the government replaces, or no longer needs the Contractor-owned software, the Contractor will provide current/security updates at no cost. If proprietary hardware is incorporated, the Contractor will provide maintenance and operational support for a minimum of 10 years upon end of the contract, at cost, or until the Government replaces or no longer needs the hardware.

4.3.1 Cybersecurity**:** The Contractor is to implement a comprehensive, modern, risk-based cybersecurity program including a cybersecurity architecture aligned with the cybersecurity program, enterprise architecture, and direction of the NNSA Office of the Associate Administration for Information Management and Chief Information Officer (NA-IM). The Contractor shall conduct cybersecurity operations to meet the requirements of Federal, DOE, and NNSA data protection and cybersecurity program at all respective security classification levels, at all times, and as provided and

authorized by the federally appointed authorizing official, or enterprise authorizing official, as appropriate. The Contractor shall, as directed, address urgent security concerns identified by NNSA including but not limited to cybersecurity incident management activities. The Contractor shall allow full, unfettered access to system logs and cybersecurity sensor data for all information resources on DOE and NNSA networks to the NNSA Enterprise Security Operations Center, and other entities as directed by NA-IM. The Contractor shall follow the NNSA SD 205.1 for implementation of a cybersecurity baseline program, provide adequate performance metrics to generate a risk-based budget process for the NSE, and adhere to data calls. The Contractor will develop an Annual Operating Plan (AOP) consistent with NA-IM guidance and will perform to the annual NNSA Office of the Chief Information Officer (OCIO) Performance Execution Guide (PEG). The utilization of COMSEC must comply with all federal requirements as given by National Security Agency (NSA) and Committee on National Security Systems (CNSS), and associated program requirements within the DOE Technical Security Program (TSP) and NNSA SD 470.6, TSP. All wireless activities must be reviewed and evaluated by a federal Certified TEMPEST Technical Authority (CTTA), and associated TEMPEST plans must be kept current. The Contractor shall fully integrate the enterprise eGRC tool, adjusting processes to coincide with out of the box implementation, and transition off of the standalone platform currently in place to the enterprise cloud instance as it is stood up. The Contractor shall utilize enterprise approved documentation to the fullest ability.

The Contractor and all subcontractors are subject to and must meet NIST Special Publication 800-171 "Protecting Controlled Unclassified Information in Nonfederal Information systems and Organization" requirements, when conducting work for the federal government. These systems are subject to review and validation of requirements by a designated NNSA inspection team. The Contractor is accountable for issues associated with these contracting activities.

4.4 Governance

Governance is the system of management and controls exercised in the stewardship of the organization. The governance system shall be consistent with NNSA governance documents (such as DOE Order 226.1B Chg 1 (Admin Chg) and NNSA Supplemental Directive 226.1C, or successor documents, included in Section J, Appendix B, *List of Applicable Directives*).

Contractors must deliver high-quality mission results in a safe, reliable, and secure manner. The Contractor will focus on NNSA transformation activities that maximize the ability to complete the mission in a way that ensures effective and efficient stewardship of the taxpayers' money. The Contractor shall streamline operations and improve efficiency to maximize mission accomplishment through a common understanding of expectations and performance accountability, supported by a strong Contractor Assurance System (CAS). The Contractor shall have a CAS as a subordinate and supporting feature of Governance as described in 4.4.1 below.

4.4.1 **Contractor Assurance System**: The Contractor shall establish and implement a Contractor designed and utilized system to manage performance consistent with Contract requirements. The CAS shall be a primary tool used by Contractor

management to measure and improve performance, ensure that mission objectives and Contract requirements are fully integrated into all operations and effectively met; ensure that workers, the public, and the environment are protected; ensure that security and cyber security requirements are met and maintained; and ensure that operations, facilities, and business systems are efficiently and effectively operated, maintained, and protected. An effective CAS integrates Contractor management, supports parent organization(s) governance and facilitates Government oversight systems as described in DOE Order 226.1B Chg 1 (Admin Chg) or its successor. NNSA oversight shall not be relied upon by the Contractor as the primary feedback in assessing its performance. The Contractor is fully accountable for performing its own assessment of these areas.

4.4.2 **Standards and Directives Reform:** The Contractor shall submit a plan within 180 days after the start of Base Period that identifies standards (e.g., ISO 9001, 14001, 18001, or other international or industry standards) to be utilized to replace other DOE requirements and provide the ability for the Contractor to operate with industry best practices. The plan shall describe how quickly the Contractor will achieve ISO certifications or other recommended standards but commit to completion no later than by the end of the second year of the Base Term. In addition, the Contractor, as part of its governance, shall continuously evaluate and examine DOE directives, orders, and requirements to propose needed exemptions or modifications to allow the Contractor to operate in the most effective and efficient manner.

4.4.3 Parent Organization(s): Recognizing M&O contractors are entities formed exclusively for the purpose of a particular contract, Parent Organization(s) have an important role in supporting Contract performance through stewardship, oversight, and reachback. On an annual basis, the Contractor shall develop, at a date established by the Contracting Officer with input from the Contractor, a multi-year Parent Organization(s) Plan, in accordance with Section H-17 Parent Organization(s) that addresses the areas below.

Savannah River Site Stewardship

As valued partners, the NNSA recognizes that its M&O contractors are stewards of more than just the physical site. Each of the NNSA M&O sites represents an institution with a rich history and a critical mission. Parent Organization(s) have an important role in helping the Contractor to be a thoughtful steward of the institution and the workforce. To that end, on an annual basis, the Contractor shall secure commitments from its Parent Organization(s) to assist the Contractor in its stewardship of the Savannah River institution. The commitments shall include, but are not limited to, the Parent Organization(s) identifying and bringing specific world class and best practices to enhance the long-term vitality of the site. Commitments shall respond to issues at the site and should position Savannah River to respond to future production and security challenges.

Oversight

Parent Organization oversight is essential to improving Contractor management and performance, ensuring compliance, as well as providing independent reviews of functional areas related to mission work. The Contractor shall identify in the Parent Organization(s) Plan opportunities for the use of Parent Organization's(s') corporate systems and corporate home and branch office personnel for the purposes of monitoring site performance and assisting the site in meeting its mission and operational requirements. The term "systems" means any discrete process, procedure, program, document, or instrument where cost of use under this Contract can be identified and quantified to the Parent Organization(s).

Parent Organization Reachback

Parent Organization(s) have unique expertise, and extensive reachback to many employees nationally and worldwide. During Contract performance, support from Parent Organization(s) may be required to address unique tasks and challenging issues related to mission work at Savannah River, provide surge support and subject matter experts as needed, and provide any other workforce reachback as needed. The Contractor's Parent Organization Plan shall address how its Parent Organization(s) will provide reachback support to enhance Contract performance.

4.4.4 Performance Evaluation and Measurement Plan: The Contractor shall participate in the formulation of Performance Evaluation and Measurement Plans (PEMP) that cover a defined period of time. The PEMP shall include performance goals, objectives, and key outcomes, and may include other measures of performance as developed by NNSA/DOE EM as a part of its Corporate Performance Evaluation Process (CPEP). Separate PEMPs will be issued by NNSA (CLIN 0002), DOE EM (CLIN 0003), and by each respective organization that issues fee plans for Sub-CLINs under CLIN 0004 and 0005 as appropriate.

4.4.5 Performance Metrics: The Contractor shall propose a list of performance metrics that provide Contractor and NNSA/DOE EM management an overall assessment of mission execution and the "health of the supporting operations" quickly and accurately. Once established, the metrics shall be part of the CAS and be provided with transparency to aid in the identification and understanding of significant performance issues.

4.5 Environmental Permits and Applications

In recognition of the Contractor's responsibility to operate in compliance with all applicable environmental requirements, the Contractor is responsible for signing environmental permits and applications as "operator or co-operator" at the site.

a) The Contractor shall assist in the NNSA's National Environmental Policy Act (NEPA) implementation, in a manner consistent and compliant with federal law and regulations (including DOE regulations at 10 CFR 1021) and the NNSA NEPA program as implemented by the NEPA Compliance Officer (NCO), or as

may otherwise be directed by the Contracting Officer. The Contractor is not authorized to undertake any action on NNSA's behalf that is subject to NEPA until NNSA has notified the Contractor that the NNSA has satisfied applicable NEPA requirements. Additionally, the Contractor shall implement an auditable system of internal controls to ensure that NEPA reviews are completed before decisions are made on the implementation or performance of proposed programs, projects, or other activities. The Contractor shall perform an annual performance assessment on the internal NEPA completion controls compliance; report the results to the head of the program or field office; provide access to all data and analyses associated with NEPA compliance activities; and report, as required by the appropriate NEPA Compliance Officer, on issues and activities that may require NEPA reviews. The Contractor shall establish and implement a Site – Wide Environmental Impact Statement (SWEIS).

b) If bonds, insurance, or administrative fees are required as a condition for such permits, such costs shall be allowable. In the event that such costs are determined by NNSA to be excessive or unreasonable, NNSA shall provide the regulatory agency with an acceptable form of financial responsibility.

c) The Contractor shall accept, in its own name, service of notices of violations or alleged violations (NOVs/NOAVs) issued by Federal or State regulators to the Contractor resulting from the Contractor's performance of work under this Contract, without regard to liability. The allowability of the costs associated with fines and penalties shall be subject to clauses of this Contract. The Contractor shall notify the Contracting Officer promptly when it receives service from the regulators of NOVs/NOAVs and fines and penalties. Nothing stated above shall affect the Contractor's right to challenge or contest the applicability or validity of such NOVs/NOAVs and fines and penalties.

d) In the event of termination or expiration of this Contract, NNSA will require the new Contractor to accept transfer of all environmental permits executed by the Contractor.

e) When providing NNSA with documents that are to be signed or co-signed by NNSA, the Contractor will accompany such document with a certification statement, signed by the appropriate Contractor corporate officer, attesting to NNSA that the document has been prepared in accordance with all applicable requirements and the information is, to the best of its knowledge and belief, true, accurate, and complete.

4.6 Defense Nuclear Facilities Safety Board and Other Government Agencies Support and Liaison

The Contractor shall support NNSA in interfacing with various Government agencies such as the Defense Nuclear Facilities Safety Board (DNFSB), Department of Defense and state regulatory agencies.

The Contractor shall conduct activities in accordance with the applicable DOE directive

and guidance on interface with the DNFSB. The Contractor shall be accountable for ensuring that subcontractors at any tier adhere to these requirements.

4.7 Interfaces with Other Site Users

Within 90 calendar days after the start of the Transition Period, the Contractor shall submit, for Contracting Officer approval, an Interface Management Plan (IMP) to identify and manage all site interfaces/services and to provide site landlord services (see Chapter II, Section 2.4, below) between DOE, NNSA, DOE/NNSA contractors, and tenant entities engaged in onsite activities. The IMP shall incorporate contractors and subcontractors to these entities, as directed by the Contracting Officer. The IMP should identify any costs related to other site users. Services may be provided by the Contractor on a cost recoverable basis as approved by the Contracting Officer. The IMP shall also address security in accordance with Chapter II, Section 1.3.3, Defense Nuclear Security, below. The Contractor IMP will become part of the Contract as Section J, Appendix Q, *Interface Management Plan*. The Contractor shall be responsible for developing and implementing a plan for interfacing and integrating activities with site contractors and tenant entities not covered by the IMP, consistent with NNSA/DOE technical direction. Services that require interface agreements shall be provided in accordance with existing or newly developed memoranda of understanding or other appropriate agreements. The Contractor will provide input to the local NNSA office regarding effective support toward common site security and operational objectives. The Government will not consider such input if one contractor has any potential Organizational Conflict of Interest (OCI) with the other contractor that is not adequately mitigated to the satisfaction of the Contracting Officer in an approved OCI mitigation plan.

4.8 Privacy Act System of Records

The Contractor shall design, develop, and maintain a system of records on individuals to accomplish an agency function in accordance with the Contract's Section I Clause entitled "FAR 52.224-2, *Privacy Act*." The applicable systems of records are available on the Federal Register. A list of applicable records will be finalized after Contract award.

4.9 Communications and Public Affairs

The Contractor shall conduct communications, information, and public affairs programs including internal and external communications; community involvement and outreach; interactions with the media, businesses, and the scientific and technical community; and liaison with local, state, Tribal, and federal agencies. The Contractor will coordinate all communications and public affairs efforts with the field office, which will maintain alignment and coordination with NNSA's Office of Communications and NNSA's Office of Congressional and Intergovernmental Affairs or DOE EM equivalent as appropriate.

4.10 Responsibilities for Sponsorship, Management and Administration of Contractor Employee Pension and Other Benefits Plan

The Contractor shall be the lead sponsor of the multiple employer pension plan, herein

referred to as the Plan, with responsibility for management, administration, funding, coordinating contributions from other plan sponsors and maintaining the qualified status of the plan. The Contractor will be responsible for determining the appropriate funding for pension contributions and will only be responsible for funding pension contributions for their employees working under this Contract. The contractor for the Liquid Waste contract, the Savannah River National Laboratory, and other DOE prime contractors in the multiple employer plan may also be participating sponsors of the Plan. These contractors will be responsible for paying their portion of the pension contributions for their employees based on funding requirements determined by the lead sponsor of the pension plan.

CHAPTER II. WORK SCOPE STRUCTURE

1.0 Programs

The Contactor shall support the following program activities:

1.1 **Defense Programs**

1.1.1 Tritium Program

The Contractor shall meet NNSA strategic plans and mission requirements through the implementation of program direction and safe and secure facility operations to:

a) Support the nuclear weapons stockpile mission by safely and reliably providing tritium and non-tritium loaded reservoirs to the NNSA and Department of Defense (DoD) in accordance with NNSA guidance and direction.
b) Maintain a reliable, resilient, and flexible tritium supply, that provides sufficient tritium inventories to meet national security demands, including the nuclear weapons stockpile requirements, reserves, hedge, and risk reduction material.
c) Support the Stockpile Stewardship Program by conducting inspections, tests, evaluations, and other operations for the surveillance of gas transfer systems as input for annual stockpile certifications.
d) Recover, purify, and bottle helium, a decay product of tritium for use in national security and other identified missions.
e) Provide a trained, qualified, and certified workforce to meet mission deliverables, including management, operations, engineering, radiological, maintenance, construction, and other skill sets as needed.
f) Provide long-term infrastructure and equipment planning to maintain a reliable, resilient, and flexible tritium supply chain, including upgrades, replacements, new technology insertion, and new facilities.
g) 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, and increase industrial and university partnerships to enhance technical capabilities.
h) Operate and maintain the Tritium Extraction Facility (TEF) and process equipment to extract tritium from Tritium Producing Burnable Absorber Rods (TPBARs) received from the Tennessee Valley Authority (TVA), including the unloading and return of TPBAR transportation casks, storage of irradiated and extracted TPBARs, processing of TPBARs to extract tritium, and the separation of tritium from other waste gases, and final disposition of extracted TPBARs, storage beds, waste gases, and other appropriate materials.
i) Operate and maintain the H-Area New Manufacturing facility (HANM) and equipment to separate hydrogen isotopes; purify, process, and store tritium inventories; process and disposition waste gases; and load and unload tritium reservoirs and shipping containers to recover tritium.
j) Operate and maintain the H-Area Old Manufacturing (HAOM) and equipment to support the receipt, inspection, finishing, and packaging of reservoirs and shipping containers.
k) Operate and maintain the HAOM, HANM, and the Materials Testing Facility (MTF) to conduct tests and evaluations in support of the GTS surveillance program.
l) Operate and maintain the balance-of-plant infrastructure to support the main Savannah River Sites Tritium Enterprise (SRTE) facilities

m) Maintain the Tritium Facilities in a safe, secure and responsive operating condition, consistent with NNSA direction.
n) Operate the NNSA Tritium operations and activities as a defined cost center business element within the contract to include budget, real estate, human resource management, and the personnel resources necessary to conduct operations, training, engineering and required maintenance; and
o) Obtain and integrate necessary support from other activities within the contract, or from other contractors, as necessary, to meet mission requirements.
p) Collaborate with the Savannah River National Laboratory (SRNL) to:

1. Support the Stockpile Stewardship Program through coordination of reservoir component Research and Development (R&D) for Gas Transfer Systems (GTS).

2. Coordinate the Engineering and Integrated Assessment program with SRNL to ensure weapons performance, reliability, safety, survivability, and responsiveness supports the Stockpile Stewardship Program. This is accomplished through activities in the Tritium program such as component and material lifetime assessments; predictive aging models; and surveillance diagnostics that are the responsibility of SRNL in leading these efforts. The Contractor shall ensure that maintenance of existing systems for the enduring stockpile is integrated with SRNL's responsibility to develop methods for surveillance of tritium reservoirs and other gas transfer system components.

3. Manage the integration of tritium loading operations and tritium inventory requirements with SRNL's responsibilities for tritium gas processing Research and Development.

4. Assist SRNL with its responsibilities for conducting Laboratory Directed Research and Development (LDRD) by preparing statements of need and participating in the selection of R&D proposals to be funded. Support SRNL's efforts to recruit and retain individuals with critical skills needed to perform tritium R&D, support SRNL's maintenance of core competencies required for current and future technical missions and participate with SRNL to increase industrial and university partnerships to enhance technical capabilities.

5. Provide effective conduct of operations and material oversight of SRNL personnel operating in Tritium facilities.

Programs that provide direction and funding to the Tritium Program include but are limited to:

1. Stockpile Major Modernization
2. Production Operations
3. Tritium Modernization
4. Capability Based Investments
5. Weapon Technology and Manufacturing Maturation

1.1.2 Plutonium Pit Production Operations and Programs

The Contractor shall manage the plutonium pit production program support and operations within the contract so that it will be positioned to be responsive to any future NNSA direction within the NSE.

The Contractor shall conduct program support of the plutonium pit production mission, coordinating with NNSA laboratories and the SRNL as needed, to:

a) Support activities related to the design, construction, and commissioning activities for the Savannah River Plutonium Processing Facility (SRPPF) and support facilities;

b) Continue to establish and mature a program office to manage SRS plutonium pit production activities;

c) Recruit, train and qualify the workforce to conduct plutonium pit production operations;

d) Establish, operate, and maintain training and operations facilities such as the Machining Training Center and the SRPPF High Fidelity Training and Operations Center to develop pit production workforce proficiency and to demonstrate prove-in process technology using inert surrogate materials;

e) Establish a supply chain to support pit production operations at SRS;

f) Support the nuclear weapons stockpile by safely and reliably providing plutonium pits in accordance with NNSA guidance and direction;

g) Maintain the SRPPF and support facilities in a safe, secure, and responsive operating condition, consistent with NNSA programmatic direction;

h) Operate the SRPPF and supporting pit production activities as a defined cost center business element within the contract to include budget, real estate, human resource management, and the personnel resources necessary to conduct operations, training, engineering and required maintenance;

i) Obtain and integrate necessary support from other activities within the contract, or from other contractors, as necessary, to meet mission requirements; and

j) Coordinate with Design Agencies, the Plutonium Center of Excellence at the Los Alamos National Laboratory (LANL), Sandia National Laboratories (SNL), Lawrence Livermore National Laboratory (LLNL), and the SRNL to meet statutory commitments and satisfy mission requirements.

Contractor coordination with DOE laboratories and the SRNL with respect to support for the SRPPF Project will be as requested by the NNSA Savannah River Acquisition and Project Management Office.

1.1.3 Stockpile Management and Production Modernization

The Contractor shall support programs supporting four major subprograms that directly support the Nation's nuclear weapons stockpile: 1) Stockpile Major Modernization; 2) Sustainment; 3) Dismantlement and Disposition; and 4) Production Operations. These efforts may require coordination across the NSE and the SRNL to execute the mission. The Contractor shall:

a) Conduct Stockpile Major Modernization activities, such as support for current and future warhead Gas Transfer System (GTS) Life Extension Program (LEP), major Modifications (Mods), and Alterations (Alts);

b) Provide Stockpile Sustainment activities, such as processing tritium and inert reservoirs and associated components in support of the enduring stockpile activities per NNSA production

directive requirements. Additionally, Stockpile Sustainment supports enduring Reservoir Surveillance, Stockpile Laboratory Tests, and Life Storage Program activities;

c) Support Dismantlement and Disposition activities, such as unloading, processing and disposition of retired GTS reservoirs;

d) Provide Production Operations activities to support production base capabilities for LEPs, surveillance, and GTS limited life component exchange (LLCE) activities;

e) Support the Stockpile Management programs for the plutonium pit mission when SRPPF approaches operational milestones;

f) Support Production Modernization programs, such as processing system modernization, to maintain process/manufacturing facility capabilities to support tritium and plutonium pit mission requirements; and

g) Support the ramp-up of tritium and plutonium pit production as described in the Stockpile Stewardship and Management Plan (SSMP), Nuclear Weapons Production & Planning Directive (P&PD), and program specific direction.

h) Conduct and support Nuclear Enterprise Assurance activities to actively manage subversion risks to the nuclear weapons stockpile and associated design, production, and testing capabilities

1.2 Nonproliferation

1.2.1 Nuclear Nonproliferation and Arms Control

NNSA's Office of Defense Nuclear Nonproliferation (DNN) works globally to prevent state and non-state actors from developing nuclear weapons or acquiring weapons-usable nuclear or radiological materials, equipment, technology, and expertise. Projected work scope within this program includes, but is not limited to:

a) Provide effective and rapid response to emergent nonproliferation and international security requirements;

b) Partner with DOE/NNSA laboratories to leverage resources and expertise in support of nuclear nonproliferation goals and objectives; and

c) Support of global nonproliferation and arms control activities, including capability development and sustainment for monitoring and verification

1.2.2 Nuclear Nonproliferation Programs

The Contractor shall provide services in support of the Nuclear Nonproliferation Programs at SRS.

1) The Contractor shall support both new facilities development activities and program mission support activities as specified below.

   a) Mobile Plutonium Facility (MPF) Support to SRNL: The Contractor shall support the development and use of mobile capabilities (e.g., Mobile Plutonium Facility and Mobile Melt Consolidate system) and teams for the characterization, stabilization, treatment, and packaging of plutonium and other materials as appropriate, including providing personnel,

facilities, equipment, packaging, and procurement support. SRNL has the lead for program and operational employment of the MPF with support from the Contractor.

2) The Contractor shall also provide scientific, technical, program, and project expertise to support the following programs:

   a) 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 other DOE contractors in executing these programs, principally the SRNL as the NNSA's lead for the program, 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.

   b) Foreign Research Reactor (FRR) Fuel Program: The Contractor shall assist SRNL with the planning and engagement of 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) Nonproliferation Research and Development (R&D): Defense Nuclear Nonproliferation R&D develops U.S. capabilities to detect and characterize global nuclear security threats in full coordination with the goals and priorities of U.S. Government mission stakeholders across nonproliferation, counterterrorism, and emergency response mission areas. The Contractor shall support NNSA and other DOE contractors, particularly the SRNL, in the development of these capabilities, by providing the necessary scientific, engineering, and programmatic experts, e.g., tritium production; nuclear safeguards; emergent threats; and nuclear verification activities.

3) The Contractor shall provide scientific, technical, program, facility operations and project expertise to support the Surplus Plutonium Disposition Program.

   a) Conduct downblend operations, conduct Criticality Control Overpack (CCO) characterization operations, and ship downblended surplus plutonium from K-Area to the Waste Isolation Pilot Plant (WIPP) in accordance with mission requirements;
   b) Scale operations in accordance with the Program Requirements Document Feed Table, including removal of material from the State of South Carolina consistent with the Settlement Agreement;
   c) Recruit, train and qualify the workforce to conduct process operations, including the SPD gloveboxes when operational;
   d) Provide maintenance for process equipment;
   e) Support establishment of International Atomic Energy Agency (IAEA) voluntary offer agreement (VOA) monitoring activities in K-Area;
   f) Provide technical support for maintaining the Program's technical baseline and identification and resolution of crosscutting issues, including security, safeguards, and transportation support;
   g) Provide detailed planning and integration function for all participants in the Program, including interface management, risk management, trend management and change control. This includes other DOE/NNSA Sites, National Laboratories, and sub-contractors. Maintain the Program's integrated schedule for the successful conduct of the Program;
   h) Facilitate strategic advancement of technology aimed at plutonium processing;

i) Work collaboratively with DOE to propose process improvements for characterization/certification of material for disposition at the WIPP;
j) Provide expertise to efficiently team with National Laboratories for the development of advanced technologies to incorporate advancements in process equipment, automation, and robotics into facility operations.

1.2.3 K Area Complex (KAC)

The Contractor shall safely operate and maintain the K Area Complex (KAC). The KAC includes the previously operational K Reactor Facility. In 1996, DOE directed that the K Reactor Facility be placed into a shutdown condition with no capability for restart. The reactor building has been modified and now serves as a material receipt, handling, storage, surveillance, and processing facility for disposition of surplus plutonium. Although no fuel, targets or rods remain in the reactor tank, it remains for the storage of reactor components and radiological material. DOE plans to continue receiving nuclear material for storage in KAC and other designated areas until final disposition of the material can be accomplished through emplacement in a geologic repository or other as-yet-to-be designated disposition.

KAC supports both EM and NNSA disposition activities. This scope includes downblending operations and an NNSA line-item project for installation of additional gloveboxes and equipment that will increase downblend operations capability, and operations of the Characterization and Storage Pad. The Contractor shall downblend Plutonium oxide with an adulterant, package into shipping containers (CCOs), support the Carlsbad Field Office contractor with characterization / acceptance, and load into TRUPAC IIs to be sent to WIPP. These scopes are as described in this 1.2 Section and Chapter III, Section 1.1.3 Surplus Plutonium Disposition (SPD) Line-Item Project.

1.3 Other NNSA and DOE Program Work

1.3.1 **Environment, Safety and Health**

These programs include Site Stewardship, Long-term Environmental Stewardship, Nuclear Materials Management Team, and energy savings initiatives required by the DOE. Projected work scope within these programs include, but are not limited to:

a) Maintain project baselines, develop Documented Safety Analysis, define quality requirements, ensure NEPA compliance, provide quarterly reports to the Government for assigned projects, support external reviews, and meet other requirements as directed by the Contracting Officer;

b) Maintain and deliver containers according to Shipment Schedules in support of stockpile management and other missions;
c) Execute the Long Term Stewardship program to meet NNSA/DOE and regulatory requirements;

d) Provide safe and secure storage, management, transportation, and disposition of nuclear and non-nuclear materials and satisfy NNSA and other DOE customer material requirements;

e) Support DOE enterprise-wide nuclear materials management and storage initiatives including, supporting the development and update of material management plans, and supporting the DOE Nuclear Materials Management Team, as requested;

f) Support packaging safety and program execution activities;

g) Develop and implement of Site Sustainability plans and other related documents;

h) Support waste management activities; and

i) Support ESH-driven data analytics activities, including Safety Analytics, Forecasting Evaluation & Reporting (SAFER).

1.3.2 Nuclear Counterterrorism and Incident Response (NCTIR)

The NCTIR program, comprised of the Offices of Counterterrorism and Counterproliferation and Emergency Operations, not only ensures the Department's emergency preparedness and response, it also assesses nuclear and radiological threats and uses the scientific knowledge resident at the U.S. national laboratories to inform domestic and international policies and regulations, contingency planning, training, and international capacity-building. These activities strengthen national and international counterterrorism, counterproliferation, and nuclear incident response capabilities. Projected work scope within this program includes, but is not limited to:

a) Provide a responsive, flexible, efficient, and effective incident response framework and capability;

b) Apply unique technical expertise within the nuclear security enterprise to prepare, prevent, mitigate, and respond to a nuclear or radiological event domestically or abroad;

c) Partner with DOE/NNSA laboratories to leverage infrastructure, resources, materials and related infrastructure, and expertise in support of counterterrorism and counterproliferation goals and objectives;

d) Establish and maintain a documented emergency management program that complies with the Contractor Requirements Document within DOE O 151.1D Comprehensive Emergency Management System; and

e) Provide baseline services that include but are not limited to, the following: SRS Operations Center operations; SRS Fire Department; Emergency Response Organization, including facilities and equipment; Facility emergency management/preparedness programs; Site and facility-level drills/exercises and assessments; and Training.

1.3.3 Defense Nuclear Security (DNS)

The DNS program protects NNSA interests from theft, diversion, sabotage, espionage, unauthorized access, compromise, and other hostile acts which may cause unacceptable adverse impacts on national security, program continuity, security of employees, and the public. The Contractor shall maintain a safeguards and security program in accordance with the directives and requirements listed in Section J, Appendix B, List of Applicable Directives.

1.3.4 Infrastructure and Operations

Infrastructure and Operations (I&O) provides the physical and operational infrastructure required to conduct the scientific, technical, manufacturing and production activities in support of program missions at SRS. The I&O mission is to ensure that the sites comprising the NSE are implementing the technologies and methods necessary for acquisition, sustainment, disposition, and space management to make infrastructure and operations safe, secure, reliable, energy efficient, and cost effective and that the right facilities and infrastructure are in place to manufacture and certify the 21st century nuclear weapons stockpile.

The key areas within I&O include the people, systems, and processes that NNSA needs to succeed in delivering mission capabilities through the planning, design, acquisition, operation, maintenance, recapitalization, and disposition of NNSA's existing facilities and infrastructure as well as executing a world-class project management program that enables the timely delivery of complex major construction and capital projects for the Nuclear Security Enterprise. Projected work scope within this program includes, but is not limited to:

a) Planning, project and program management, and real estate support of acquisition, operations, maintenance, modernization, and disposition for NNSA's infrastructure:
   i. Conduct preventive, predictive, and corrective maintenance of process and equipment/facilities
   ii. Operate and maintain the balance-of-plant to support SRS Facility operations.
   iii. Conduct Environment, Safety, and Health (ES&H) activities to ensure the well-being of site workers, the public, and the environment
   iv. Perform physical maintenance of various shipping containers
   v. Develop and implement an effective and efficient radioactive waste program for all generated radioactive waste and dispose of such waste in a timely fashion to ensure mission success; and
   vi. Support processing and isotope recovery from Mk-18A stored at SRS.

b) NNSA Operations of Facilities Program:

   i. Manage and disposition waste generated at the site;

c) NNSA Recapitalization Program:

   i. Disposition Program to support footprint reduction;
   ii. Streamlined Project Execution, Acquisition & Recapitalization (SPEAR); and

iii. Energy Resilient Infrastructure and Climate Adaptation (ERICA) Projects;

d) Maintenance & Repair Program:

i. Oversee roofing projects under Enterprise-wide Roofing Asset Management Program;
ii. Oversee cooling and heating projects under the Enterprise-wide Cooling and Heating Asset Management Program; and
iii. Maintain BUILDER information management systems;

e) Project Management:

i. The Contractor shall perform design and construction activities for all minor construction and General Site Projects. New major construction projects, including Expense and Line Item, may be included if determined by the NNSA to be in the Government's best interest.

ii. The Contractor shall perform initial project development (for all projects, including IT-related projects, regardless of dollar value), project management, design, and construction management activities in accordance with required DOE Orders.

iii. The Contractor shall adopt existing Construction Labor Agreements and shall require subcontractors engaged in construction to adopt Construction Labor Agreements.

iv. Major Capital Projects covered by this Contract include, but are not limited to:
- Savannah River Plutonium Processing Facility
- Tritium Finishing Facility
- Surplus Plutonium Disposition (SPD)

f) Campus Plan

Historically SRS missions were spread out across the 310 square mile site. Infrastructure (roads, bridges, water, steam, power, sewer, office space, warehouses, etc.) was built to support these wide-ranging missions. As aging infrastructure exceeds its useful life and the site mission continues to evolve, there is an opportunity to consider more centralized, forward-looking solutions. A campus plan approach would be the driving force behind this effort. The Contractor shall continue the efforts to develop and execute a campus plan that works to right size operations in an efficient and cost-effective manner to ensure the execution of current and future mission and NSE initiatives.

1.3.5 Nuclear Emergency Support Team (NEST)

The Contractor shall provide radiological protection professionals to support the Nuclear Emergency Support Team, specifically the DOE Region 3 Radiological Assistance Program (RAP) and Aerial Measuring System (AMS) assets. DOE Region 3 encompasses the states of Alabama, Florida, Georgia, North Carolina, and South Carolina; however, RAP and AMS support may also be directed outside of

Region 3, including OCONUS locations. The mission of RAP is to provide a deployable, tailored capability to assist other Federal, State, Tribal and local agencies, as well as private businesses and individuals, in responding to incidents involving nuclear/radiological materials. RAP also provides training assistance to Federal, State, Tribal, and local agencies to enhance the overall national response capability to a nuclear/radiological event. RAP responds to a variety of crisis response and consequence management missions, such as: incidents involving fixed nuclear facilities, transportation events, lost or stolen radioactive sources, nuclear weapons incidents/ accidents, and terrorist use or threatened use of nuclear/radiological materials. AMS provides an aerial based response for rapid survey of radiation and contamination following a radiological event as well as a search capability for lost or stolen radioactive sources.

The Contractor shall maintain a minimum of four full-time staff to assist the DOE/NNSA Regional Program Manager in managing and maintaining programmatic elements (e.g., plans, procedures, training, and equipment readiness) as well as executing the RAP and AMS missions. With augmentation from other SRS contractors, the Contractor shall be principally responsible to ensure a minimum cadre of 21 personnel are assigned the collateral duty to staff the RAP/AMS teams, as directed by NNSA. The Contractor shall ensure all RAP team members obtain and maintain a DOE Q clearance, and a select group of personnel obtain sensitive compartmented information (SCI) access, as directed by NNSA. The Contractor shall ensure that individuals designated to support the RAP/AMS teams are provided the opportunity to participate in required training and drills/exercises to maintain their qualifications.

1.4 EM Closure Activities

1.4.1 Soil and Water Remediation

The Soil and Water Remediation program includes the operation and maintenance of six (6) active soil and groundwater remedial systems, and the monitoring of 33 passive (natural attenuation) regulatory required soil and groundwater remedial systems to contain contaminant plumes within the SRS boundary, and to protect human health and the environment. Also included is the continuing post-closure and post-Record of Decision care, and surveillance and maintenance at 73 closed waste sites (approximately 900 acres) and at 58 surplus facilities to prevent deterioration, environmental releases, or structural failure. The program also monitors, performs analysis and reports on over 2,000 groundwater wells (approximately 4,300 sampling activities) and five (5) major streams, the Savannah River Floodplain Swamp and the Savannah River to demonstrate effectiveness of remedial systems.

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 develop and implement alternative long-range strategies, appropriate technologies, and approaches in the refinement of Area Completion and long-term stewardship activities to reduce out-year baseline costs.

1.4.2 Deactivation and Decommissioning (D&D)

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 should incorporate innovative approaches to D&D facilities at the SRS that would offset lower funding levels.

The Contractor shall provide the overall management of the D&D program at SRS. D&D activities may include relocation of existing functions and personnel, characterization, risk analysis, evaluation of alternatives, stabilization, and final decommissioning. All D&D activities shall be conducted through an integrated approach with applicable DOE Directives and regulatory requirements, taking into account historic properties and historic preservation requirements.

Possible facilities included in the period of performance include the D area powerhouse and ancillary facilities, 235-F Plutonium Facility and ACP-owned facilities.

1.4.3 Deactivation and Decommissioning Requirements

The Contractor shall provide all equipment, labor, parts, and supervision required to perform the assigned D&D tasks and to ensure that the quality of items and services meets the requirements of this PWS, applicable Work Order Documents, and all current laws, regulations, and procedures.

a) Deactivation: Initial deactivation occurs by the owning operational organization prior to transfer for decommissioning. Upon transfer for decommissioning, limited deactivation activities can occur. Activities may include asbestos removal, deenergizing (cold and dark), equipment disposition, and others to ready the facility for final decommissioning.

b) Decommissioning: This scope is typically the final stage (end state) for the facility when any unacceptable residual hazards are eliminated. Possible end states include transfer or removal to another program, demolition, in situ disposal, or a combination of the two. The Contractor shall assist DOE-SR in the coordination of all decommissioning activities with the Environmental Protection Agency (EPA) and the South Carolina Department Environmental Services (SCDSES) through the Federal Facility Agreement.

c) The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) will be the regulatory approach for decommissioning, as negotiated between the DOE-SR, EPA and SCDES using the core team process. Additional information, requirements and milestones associated with facility decommissioning are documented in the Federal Facility Agreement (FFA) for the SRS.

d) The Contractor shall use a tailored approach as defined in DOE G 430.1-4, *Decommissioning Implementation Guide* for safe dispositioning of an inactive facility. The guide documents five phases of safe dispositioning of an inactive facility. Examples of each type of hazard classification of a facility that could be decommissioned at the SRS are Other Industrial or Clean, Radiological or Chemical and Nuclear. Depending on the hazard classification of a facility the decommissioning model could be a Simple Model, Integrated Sampling Model or CERCLA as documented in the Facility Decommissioning Evaluation (FDE).

(1) Simple- Least rigorous and most cost-effective of the 3 models. Includes clean facilities where the only safety risks are risks to workers on the project. If the facility has releases within the facility and or to the environment, the facility has been downgraded from a higher hazard category or if releases within the facility or the environment has been downgraded from a higher hazard category, the model elevates to an Integrated Sampling

Model (ISM). There are approximately 611 structures (equaling approximately 8,330,067 square feet) to be decommissioned utilizing the simple model.

(2) ISM is the same as a Simple Model except requires verification characterization and includes low hazard chemical facilities containing small amounts of contamination. The ISM also includes facilities where a release has occurred within the facility or to the environment or facilities that have been downgraded from a higher hazard category. There are approximately 157 structures (equaling approximately 814,227 square feet) to be decommissioned utilizing the ISM model.

(3) CERCLA Model – Most complex, most time consuming, requires most documentation and stakeholder involvement, and most costly of the three models. This model uses the CERCLA Removal or Remedial Action process and includes Nuclear Facilities (Hazard Category 2 or 3), Radiological Facilities and High Hazard Chemical Facilities. There are approximately 63 structures (equaling approximately 1,579,902 square feet) to be decommissioned utilizing the CERCLA model.

Integration with all site tenants is required for safe and compliant decommissioning of facilities. The Contractor will perform engineering, modeling and regulatory negotiations and document submittals to facilitate the decommissioning of a facility. The Contractor will perform the limited deactivation and decommissioning scope in accordance with all applicable laws, procedures, and regulations.

1.4.4 Radiological Work

Work within a radiological facility may be required. Contractor employees shall receive the necessary Radiological Worker training as required prior to entering and performing assigned tasks within these facilities.

1.4.5 Solid Waste

The Contractor shall manage the Solid Waste Program to safely and effectively store, treat, and dispose of SRS solid wastes including transuranic, low-level radioactive waste, mixed low-level radioactive waste, hazardous, sanitary waste, and construction and demolition. The Solid Waste Program also includes pollution prevention, waste minimization, waste certification, and other waste management support functions. The Contractor shall ensure that the handling, treatment, storage, transportation and disposal of existing “legacy” and newly generated solid waste is environmentally sound and in compliance with DOE Directives, Standards, Manuals, and applicable regulations, rules, and requirements. These include, but are not limited to, DOE Order 435.1 and its associated manual, guide and technical standard (DOE O 435.1, DOE M 435.1-1, DOE G 435.1-1, DOE-STD-5002-2017) and Section 3116 of the National Defense Authorization Act for Fiscal Year 2005.

The Contractor shall manage and integrate site-wide solid waste recycling, treatment, storage, disposal, and transportation activities and implement waste minimization/pollution prevention initiatives. The Contractor shall also provide on-site/off-site waste generators with technical support and verification of compliance with waste acceptance criteria, facility safety basis and Disposal Authorization Statement.

The Contractor shall:

a) Conduct preventive, predictive, and corrective maintenance of Solid Waste management facilities to support site operations, including waste burial facilities, waste vaults, surface storage facilities, equipment, and the construction debris landfill;

b) ES&H activities shall be conducted to ensure the well-being of Solid Waste and other site workers, the public, and the environment;

c) Maintain all stored waste streams in a safe configuration and in approved locations through disposition to include on-site / offsite storage, treatment, transport, and final disposal;

d) Pre-plan, review, receive, store, characterize (as necessary), package and transport hazardous (HW) or mixed low level waste (MLLW) from the various SRS Waste Generators for final treatment and disposal at an approved offsite treatment, storage and disposal vendor (TSD) in compliance with the authorized safety basis, LDR, TSCA Regulation, DOE orders, and federal, state, local requirements.

e) Receive, characterize, store, package, and ship Low Level Waste (LLW) to an approved off-site commercial, a federal disposal facility, or dispose in the E-Area Low Level Waste Facility (ELLWF) in accordance with DOE Order 435.1 and Department of Transportation (DOT) regulations.

f) Receive, store, characterize, inspect, re-containerization, remediation, package, and transport remote handled (RH) / contact handled (CH) Transuranic waste (TRU) from SRS to WIPP for final disposal. Support characterization, advanced knowledge (AK), and certification process performed by a contract team for the DOE WIPP Sites Management and Operations (M&O) contractor.

g) Manage a disposition plan for all obsolete, excess, or end of life for equipment including large heavy construction equipment, TRU Pads, and modular structures.

h) Maintain an appropriate nuclear safety basis for the waste streams and certified waste generators;

i) Support treatment, storage, and disposal of newly generated LLW, MLLW, HW, and sanitary waste;

j) Maintain qualifications and certification as a WIPP generator while meeting the WIPP WAC, RCRA, and the state of New Mexico permit requirements;

k) Maintain qualifications and certification as a generator for the Nevada National Security Site (NNSS) while meeting the NNSS Waste Acceptance Criteria, RCRA, and the state of Nevada permit requirements;

l) Provide surveillance and maintenance for the Consolidated Incinerator Facility (CIF);

m) Maintain and update, as required, the ELLWF Performance Assessment (PA) and submit the PA Annual Summary Report (ASR) to the Low-Level Waste Disposal Facility Federal Review Group (LFRG) to demonstrate appropriate long-term protection of the public and environment during ELLWF operations and after closure of the facilities;

n) Maintain and update, as required, the SRS Composite Analysis (CA) and submit the CA ASR to the Low-Level Waste Disposal Facility Federal Review Group (LFRG) to demonstrate appropriate long-term protection of the public and environment;
o) Prepare compliance documents and perform activities in accordance with DOE Order 435.1 and its associated manual, guide and technical standard (DOE O 435.1, DOE M 435.1-1, DOE G 435.1-1, DOE-STD-5002-2017); and
p) Pre-plan, review documentation with TSD, and support shipment for the disposition of waste under the High-Level Waste Interpretation (HLWI)

1.4.6 Sanitary Solid Waste

Provide sanitary waste recycle services for SRS Municipal Sanitary Waste (MSW) stream (e.g., non-hazardous waste/recyclables) in a Material Recovery Facility (MRF) that is permitted as a Class 3 MSW Processing Facility. SRS is considered a municipal site; therefore, SRS is required to send municipal sanitary waste that could not be recycled to a Class III State Permitted Landfill per SC Regulation 61-107.19. The Contractor shall divert at least 50 percent of non-hazardous solid waste from landfills by fiscal year 2025; and 75 percent by fiscal year 2030.

1.4.7 Nuclear Materials Stabilization and Disposition

The Contractor shall safely and effectively manage nuclear materials and facilities in accordance with applicable DOE Directives and requirements. Management of nuclear materials at SRS includes four distinct but integral functions: receipt, storage, operations, and disposition. The Contractor shall operate and maintain F-Area (excluding F Tank Farm), the H-Canyon Complex, K-Area Complex, F/H Laboratory, and L-Area to support storage and disposition of nuclear materials and SNF, as required by DOE. The Contractor shall perform necessary lay-up, deactivation and decommissioning work, and long-term surveillance and maintenance on Nuclear Material facilities no longer operating, including the Receiving Basin for Offsite Fuel (RBOF) in H-Area, F-Canyon Complex (including the FB-Line), F/H Laboratory, and F-Area Material Storage (FAMS) Building 235-F. Facilities include large storage tanks used to hold various chemical solutions, industrial support facilities, administrative buildings, sand filter facilities, and supporting utilities including water, steam, electricity, industrial air, conditioned air, underground transfer piping, and sanitary waste systems. The desired outcome is to maintain the general areas, including firewater, utilities, lighting, buildings, and grounds maintenance. The Contractors shall implement and maintain support programs including design, construction, nuclear safety documentation, environmental protection, quality assurance, configuration management, criticality safety, safeguards and security, occupational safety and health, conduct of operations, emergency preparedness, training, and all other programmatic requirements.

Tasks include:

a) Perform activities to accept receipts of nuclear materials in support of the non-proliferation program of the United States. These receipts may be from domestic or foreign sources. Receipt includes the review of the material to ensure the safety of the SRS storage and processing facilities;

b) Perform activities to place and maintain nuclear materials in a safe, secure, and stable form. These materials include spent nuclear fuel located in the L-Area facility complex that may have originated from past operations or from U.S. and foreign research reactors and Nuclear Materials such as surplus Plutonium stored in K-Area. Storage shall be managed safely, securely, and efficiently to support site and DOE complex-wide consolidation and disposition missions;

c) Operate and maintain the H Canyon Complex to support stabilization and disposition of nuclear materials and spent nuclear fuel, as required by DOE. For planning purposes, as aligned with Accelerated Basin De-inventory (ABD) and the Liquid Waste missions, DOE has assumed that H Canyon operations will contribute up to approximately 300,000 gallons per year of liquified discards to the Tank Farm through February 2034;

d) Maintain an effective program to facilitate safe and secure nuclear material shipments consistent with the current authorization agreement and subsequent revisions;

e) Stabilize, de-inventory, and transition excess nuclear facilities and ancillary structures for D&D;

f) Continue processing of SNF in H-Canyon to meet site directed mission requirements and to develop future disposition alternatives. This includes bundles of Material Test Reactor (MTR) SNF and High Flux Isotope Reactor (HFIR) cores stored in L Area. The intent is for the materials to be dissolved and dispositioned as directed by the Department. Future DOE decisions may require the Contractor to adapt and modify SNF operations to implement changing Environmental Management missions, including additional fuel types and revised disposition paths. The Contractor will also develop plans for the disposition of the remaining SNF for geologic disposal;

g) Operate and maintain the L-Area basin water chemistry, fuel inspection and transport of fuel from L-Area to H-Canyon and maintain the L-Area support facilities; and

h) Manage the storage of the site's inventory of heavy water.

H Canyon Complex

The Contractor shall operate and maintain the H-Canyon facility in a safe and secure manner. The facility is the nation's only remaining hardened large production scale, chemical separation facility and is integral to DOE's efforts to minimize and eliminate nuclear materials through safe dissolution and chemical separation, allowing removal and separation of specific isotopes for reuse or proper disposition thereby reducing proliferation risks.

The H-Area facilities support the DOE Enriched Uranium and Plutonium Disposition programs by reducing proliferation risks of nuclear materials that have been recovered from storage locations throughout the world. The H-Canyon Complex includes "H-Canyon & outside Facilities, H-Area" and "HB-Line Facility."

These nuclear facilities include storage tanks containing various chemical and nuclear material solutions, industrial support facilities, administrative buildings, sand filter ventilation facility, and supporting utilities including water, steam, electricity, industrial air, conditioned air, underground transfer piping and sanitary waste. In accordance with 50 U.S. § 2633 "The Secretary of Energy shall continue operations and maintain a high state of readiness at the H-Canyon facility at the Savannah River Site, Aiken, South Carolina, and shall provide technical staff necessary to operate and maintain such a facility." The current approved mission in the Amended Record of Decision is disposition of

the L-Basin inventory of aluminum and non-aluminum based SNF necessary to minimize the inventory of SNF remaining in L-Basin when the availability of the Liquid Waste system mission is complete (currently February 2034). A change to the above-referenced statute will be necessary upon determination that the H-Canyon capabilities are no longer required.

The Contractor shall work collaboratively with DOE to identify and propose management and engineering organizational efficiencies in the operation of H-Canyon and SRS aging nuclear facilities throughout the performance period of the Contract.

F Canyon Complex (FCC*)*

The Contractor shall safely operate and maintain the F-Area Complex. The facility is comprised of the deactivated F Canyon building including the FB-Line, large storage tanks used to hold various chemical solutions, industrial support facilities, administrative buildings, sand filter facilities, and supporting utilities including water, steam, electricity, industrial air, conditioned air, underground transfer piping, and sanitary waste. The FCC was constructed in the 1950s to process plutonium and other nuclear materials for national defense purposes and had safely done so for over 50 years. Most of the facilities in the FCC are now deactivated and are being maintained as long-term Surveillance and Maintenance (S&M) facilities. There are no current or future missions planned for the FCC. The FCC and other support facilities are being maintained in a transitional S&M condition. The FCC includes F-Canyon and FB-Line (Building 221-F) and the outside facilities.

F-Area Material Storage (FAMS) Building 235-F

The Contractor shall safely operate and maintain the F Area Material Storage (FAMS) building (Building 235-F). Building 235-F is a robust blast resistant, windowless, two-story, reinforced concrete structure. This production facility's mission was the receipt, storage and disbursement of plutonium-bearing materials in support of SRS and the DOE complex. In 2006, the storage vaults for nuclear materials were emptied, and the facility has undergone cleanup and risk reduction activities by removing material at risk.

A portion of the facility is in an S&M mode while other areas have been de-inventoried to reduce Special Nuclear Materials (SNM). The 235-F Building includes Plutonium Fuel Form (PuFF) Facility cells and gloveboxes, Actinide Billet line, Plutonium Experimental Facility and a metallography lab. The Contractor may be required to complete the activities for lay-up of Building 235-F into a cold and dark state in preparation for decommissioning.

L Area Complex – Spent Fuel Storage

The Contractor shall safely operate and maintain the L-Area Complex, including the former reactor building, disassembly basin, and support facilities. The facility has been modified and now primarily serves as a radioactive material storage facility. The disassembly basin is a chemically controlled SNF wet storage basin. It currently stores and receives SNF from research reactors and other miscellaneous nuclear material to be handled in a safe manner. This includes receipt, inspection, cropping, bundling, de-bundling, and re-bundling of fuel. The basin contains approximately 3.4 million gallons of water and varies in depth from 17 feet to 50 feet. The basin walls are below ground and are constructed of thick steel-reinforced concrete. The building has a dedicated cask decontamination facility and a Nuclear Assurance Corporation (NAC) legal weight truck (LWT) cask

dry-unloading capability using the shielded transfer system (STS).

The LWT cask plays a major role in the shipment and receipt of Foreign Research Reactor (FRR) fuel due to the various assembly types compatible with the cask and the number of assemblies that can be shipped per cask. The STS is utilized to unload casks in a dry well protecting workers from radiation exposures in-air due to limited height of the L-Basin cranes and inadequate water depth in the L-Basin transfer pit. Wet storage of SNF in L-Basin might be necessary into the 2050s or beyond.

The dry fuel storage area (DFSA) is an enclosed, isolated area located in the southeast corner of the disassembly area. The DFSA is 10 feet wide and 24 feet long, contains minimal combustible material and has a normally closed locked door due to high radiation conditions. SNF is handled in the disassembly area and stored dry in drums in the DFSA.

The reactor building serves as one of the three site's heavy water storage areas. The heavy water is stored in tanks on the -20-foot elevation and in 55-gallon drums located in the process room, crane maintenance area, final storage area, -40-foot elevation crossover area, -40-foot elevation access wells, and the -40-foot elevation motor rooms. Heavy water is also stored in K-reactor building (both drums and tanks) and in C-reactor but only in tanks.

The Contractor shall work collaboratively with DOE to identify and propose alternative disposition and storage strategies for spent nuclear fuel and disposition strategies for heavy water stored at the three reactor facilities throughout the performance period of the Contract.

Receiving Basin for Off-site Fuel (RBOF)

The Contractor shall safely provide S&M and deactivation of the Receiving Basin for Off-Site Fuel (RBOF). The mission of the RBOF was to store aluminum-based spent nuclear fuel from research reactors worldwide in support of the Department of Energy's "take back" policy regarding United States origin enriched uranium. Built in the early 1960s, RBOF is a 139-foot wide by 148-foot-long steel frame structure that houses water-filled basins for cask unloading and spent nuclear fuel repackaging and storage. The building includes the basin areas, a control room, and an attached facility for water filtration and deionization. The basin area consists of two storage basins, three working basins (for cropping, bundling, inspection, and interim storage), a cask loading/unloading basin, and a cask decontamination pit. The basins vary in area and depth with an unloading basin depth from 29 to 45 feet.

A project was initiated in 1997 to de-inventory the RBOF due to size limitations that would not support increased off-site receipts and transfer the spent nuclear fuel to L-Basin. This effort was completed in 2006 with RBOF transitioned into long term, low-cost S&M condition until deactivation is completed and turned over to D&D.

F/H Laboratory

The Contractor shall safely maintain the F/H Laboratory facilities in a safe and secure manner during deactivation. The primary mission of the F/H Laboratory over the last 50 years has been to support the chemical separations processing activities in F- Area and H-Area. Samples received from the canyons and B-Lines were subjected to the required radiological and chemical tests. Results from these tests were used to effectively operate the canyons. The F/H Laboratory also supported tank farm operations, reactor area programs, the effluent treatment facilities, and the site waste

characterization/remediation effort.

F/H Lab is currently in the deactivation mode of operation. The F/H Lab includes Buildings 772-F, 772-1F, and 772-4F and the B-25 Pad. The LR-56S loading station supports the 772-F facility. Building 772-F is of blast-resistant concrete construction and was placed in service in the mid-1950s. Building 772-1F is of standard commercial steel and concrete block construction and began operations in October 1987. Building 772-4F is of steel construction in accordance with DOE requirements and was placed in service in July 1993.

1.5 Strategic Partnership Programs (SPP) / Other Reimbursable Work

This includes the management and execution of other assigned programs related to national security missions for DOE, other Government agencies, foreign governments, or privately owned organizations on a non-interference basis. Work within this scope must be approved by the Contracting Officer.

1.6 Other Capital Construction Project Support to NNSA or DOE-EM

The Contractor shall, upon request of NNSA, provide additional services and/or support to NNSA or DOE EM including execution of Capital Construction Projects under DOE O 413.3B and the execution of other construction projects or other activities in service to NNSA or DOE-EM. Such projects or activities will be performed under Sub-CLINs in CLIN 0004 and CLIN 0005.

1.7 Exceptions to the Scope of Work

The Scope of Work for this contract includes all work necessary for management, operation, maintenance, and support of the SRS, except the following:

(a) Natural resources and forest products management activities currently managed by the U.S. Forest Service (USFS) – Savannah River through an interagency agreement between DOE and the USFS-SR.

(b) Cultural resources management activities currently managed by the Savannah River Archaeological Research Program through a cooperative agreement between DOE and the University of South Carolina.

(c) Basic and applied ecological research, education activities, and outreach efforts currently managed by the Savannah River Ecology Laboratory through a cooperative agreement between DOE and the University of Georgia.

(d) Site security currently managed under a federal prime contract with Centerra.

(e) Scope of Work being performed by SRNL including:
(1) all work being performed by the laboratory for operations and maintenance of facilities assigned to SRNL;
(2) all work as a result of site interface agreements: direct funded analytical, R&D, and

other tasks being performed for site EM and NNSA programs; work for other DOE sites (both contractors and DOE); work for other agencies; CRADAs; SPPs; and any other work being a part of the general and specific deliverables described in the M&O SRNL Contract.

(f) All work performed under the LW Contract SOW to receive, store, treat, and dispose of radioactive liquid waste. This includes:

(1) Operations and maintenance of the F-area and H-area Tank Farms and auxiliary equipment
(2) Operations and maintenance of the Salt Waste Processing Facility (SWPF) in J-area
(3) Operations and maintenance of the Defense Waste Processing Facility (DWPF) in S-area including the Glass Waste Storage Buildings
(4) Operations and maintenance of the End Stream Delivery System (ESD) including the Effluent Treatment Facility (ETF) and the Saltstone Production Facility (SPF)
(5) SDU line-item construction activities
(6) LW Operational Closure activities for tanks and ancillary structures

(g) Scope of work performed by Ameresco including:
(1) Operations of the biomass cogeneration facility providing steam to F, H, and S areas and 8-12 Megawatts of power to electrical grid.
(2) Operations of steam biomass facilities in L and K areas

(h) Dominion Energy provides power to multiple site substations. The M&O Contractor is not responsible for the generation of power but will interface with Dominion and is responsible for distribution of power across site through site-owned power lines.

2.0 Functional Support

The Contractor shall provide:

2.1 General Support

General management and program management functions including executive direction, human resources, financial support services, procurement, legal services, central administrative services, program and project controls, information outreach, information services, and other general support functions.

2.2 Mission Support

Mission support functions including environment, safety and health, facilities management, maintenance, utilities, safeguards and security, logistics support, quality assurance, and laboratory/technical support.

2.3 Site Specific Support

Provide site specific support including management and incentive fee administration, state and local taxes, and direction of a DOE-approved Plant-Directed Research, Development and Demonstration (PDRD) Program that supports science-based manufacturing related to the NNSA weapons mission, and encourages advanced research, development, and demonstration work to enhance the science and technology capabilities and core

competencies required to fulfill the mission of nuclear production.

2.4 Landlord Services and Site Support

Landlord Services (LLS) are SRS-wide services utilized by all tenants which provide for the safety & security of SRS personnel, management and maintenance of Site common infrastructure and other necessary Sitewide services. LLS examples include: Fire Department, Emergency Services, SRS Operations Center (SRSOC), Site Environmental Monitoring, Roads & Bridges, Site common facilities, Site Geotechnical Engineering and SRS Communications. Essential Site Services (ESS) are services provided by support divisions that benefit the operating facilities at SRS. ESS examples include: Site Laboratory Operations, Site Engineering Standards, Quality Services, Purchasing & Receiving and Medical (not utilized by all tenants).

The Contractor shall execute assigned landlord responsibilities, including LLS and ESS, and provide a range of services to other organizations doing work on the SRS as directed by the Contracting Officer. This may entail the provision, procurement, enhancement, implementation, and assessment of such services. Except as otherwise directed by the CO, services to other contractors generally do not extend to within their facilities or areas under the control of other tenant organizations. Examples of services that may be required include but are not limited to:

(a) ES&H on a comprehensive, sitewide basis,
(b) Engineering and Construction such as Engineering and Design and Technical Services; Construction Management Services; Integration Services, and
(c) Operations Support such as participation in energy efficiency goals; infrastructure maintenance except as controlled by other tenant organizations; operation of utilities; emergency preparedness and operations; fire and emergency medical response; site training, personal security and badging, and wildfire management.

CHAPTER III. CURRENT PROJECT STATUS

1.0 Project Summary

1.1 NNSA Capital Construction Projects

1.1.1 Savannah River Plutonium Processing Facility **(SRPPF)**

The M&O shall perform work related to SRPPF under CLIN 0004A.

In February 2018, the Department of Defense issued the *Nuclear Posture Review* which recognized that there was no margin for further delay for recapitalizing the physical infrastructure needed to produce strategic materials and components for U.S. nuclear weapons. This resulted in the requirement to "Provide the enduring capability and capacity to produce plutonium pits at a rate of no fewer than 80 pits per year by 2030" to maintain the nation's nuclear deterrent.

To achieve this requirement, NNSA released its recommendation to pursue a two-site solution for production of 80 pits per year - Los Alamos National Laboratory (LANL) would produce at least 30 War Reserve (WR) pits per year (PPY) during 2026 and SRS would produce at least 50 WR PPY during 2030. Based on repurposing SRS Building 226-F for the 50 PPY production rate, SRNS submitted and received NNSA approval of a conceptual design package (CD-1) for the SRPPF Project.

SRS's Building 226-F is being repurposed as the SRPPF which is being designed and constructed with a 50-year operating life. The facility will provide a safe, secure, environmentally compliant pit manufacturing capability based on existing manufacturing practices and techniques. The SRPPF will be an integral part of a broader weapons complex, and it is assumed that existing complex production facilities now manufacturing non-plutonium pit components will continue to be suppliers in the future and will support SRPPF plutonium pit production. The primary source of SRPPF feedstock material will be in the form of pits shipped to the SRPPF for recycling. These returned pits will be disassembled to recover plutonium and uranium. Recovered uranium is packaged and shipped to Y-12 to undergo further processing. Recovered plutonium will be purified to remove impurities accumulated through aging and recycled in the production of new pits. Purified plutonium will be cast, machined, and assembled into acceptable pits for the enduring U.S. Nuclear Weapons Stockpile. This will be accomplished using a production line with capabilities of producing 50 PPY.

The SRPPF will include analytical chemistry and material characterization labs to determine the chemical constituents, isotopic fractions, bulk properties, and other chemical attributes, as appropriate, of samples generated throughout the pit fabrication flowsheet, including the material supply, recycle, and waste management operations. The SRPPF will include process development space to develop and introduce new fabrication processes into the fabrication lines without adversely affecting ongoing manufacturing operations.

The High-Fidelity Training and Operations Center (HFTOC) will provide a cold unclassified and cold classified (up to Secret /Restricted Data) training and process development capability at Savannah River Site to support operator certification and qualification, cold Development, Operational Readiness Review preparation, First Production Unit acceleration, parallel path development for project and program, production ramp-up, and continuous employee training. The HFTOC requires equipment and processes that are fully enclosed in gloveboxes with inert atmospheres and connected via a material handling trunkline as well as free standing processes that are part of the production flow sheet.

Code of Record

- Savannah River Plutonium Processing Facility (SRPPF) Project Program Requirements Document, Rev.4). (March 2024).
- SRPPF Project Code of Record, P-ESR-F-00008,. Rev. 4
- *Baseline (dated) at time of contract modification execution*

1.1.2 Tritium Finishing Facility (TFF)

TFF will be included in the scope at Contract award. The Contractor will execute the objectives of this project and operate the facilities at project completion. It is expected the Contractor may award competitive subcontracts for various portion of the work. The Contractor shall support NNSA's Production Modernization and Stockpile Management missions through the execution of the Tritium Finishing Facility (TFF) line-item project, which will build new facilities and refurbish existing facilities to meet NNSA directive requirements. The TFF complex includes two new process buildings, a Hazard Category (HC)-2 nuclear facility and a HC-3 nuclear facility. Additionally, the TFF Project includes removal of three warehouses, construction of one warehouse, and upgrades to utilities and infrastructure to support these facilities. The required utilities are available in the immediate area; however, the Project will require relocation of some of these utilities, the perimeter road and expansion of the perimeter fencing.

The Contractor will be the project Design Authority and shall support overall project integration activities. It is anticipated the Contractor may award competitive subcontracts for various portions of the work. In the event any of these activities are performed by other contractor(s), the Contractor shall provide site access to such other contractors or entities and to cooperate with, accommodate, and to provide such logistical support to such other contractors or entities as needed and/or as directed by the Contracting Officer.

1.1.3 Surplus Plutonium Disposition (SPD)

SPD will be in included in the scope at Contract award. The Contractor will execute the objectives of this project and operate the facilities at project completion. It is expected the Contractor may award competitive subcontracts for various portion of the work. The contractor will execute the SPD project. The SPD Project will expand the capacity at SRS for down-blending plutonium oxide with an adulterant for future disposition at a geologic repository. The four primary capabilities to be constructed by the Project are 1) Un-package plutonium oxide; 2) Dry blend with adulterant; 3) Perform non-destructive assay and packaging; and 4) Stage down-blended plutonium oxide/adulterant. The Contractor, under the DOE-Environmental Management (DOE-EM) Program, currently has a small down-blending operation in the existing K-Area Interim Surveillance (KIS) glovebox.

The SPD project includes the design, procurement, construction, testing and start-up of down-blending glovebox process lines and associated support infrastructure in K-Area facility. The project includes remodeling of a portion of the 105-K Building within the K-Area complex, which is a Hazard Category (HC)-2 and Security Category 1 facility. The project includes the purchase and installation of 3 glove boxes, process and process support equipment and associated utilities. A HEPA and Electric Building, as well as a diesel enclosure, will be built in an area adjacent to the 105-K Building. Also, the project scope will include disassembly and removal of the equipment and commodities in KAC, pre-construction security modifications and site preparations prior to CD-2/3.

1.1.4 Emergency Operations Center Replacement

The SRS Emergency Operations Center (EOC) Line-Item Construction Project is expected to replace the existing primary EOC, Savannah River Site Operations Center (SRSOC), and Alternate SRSOC facilities with newly designed and constructed, fully compliant (DOE Order 151.1D and NFPA 1221) facilities, which will provide a safe and secure working environment for the occupants and more efficient and advanced operating conditions during Site emergencies. The work scope includes design and construction of new facilities (primary EOC, primary SRSOC, and alternate SRSOC), procurement and installation of new components and equipment, re-utilization of or modification to existing equipment and systems to the greatest extent practicable (i.e., software, hardware, networking components, etc.) and tie-in to existing site utilities. The primary and alternate SRSOC facilities (911 Center) require approximately 10,000 square feet each, and the EOC requires approximately 15,000 square feet of space to accommodate approximately 300 people during peak emergency operations. The current facility that houses the primary SRSOC and EOC is approximately 250,000 square feet. Once the SRSOC and EOC are relocated to the newly constructed facilities, the existing facility will be available for deactivation and decommissioning, which is not included in the scope of this line item. The existing alternate SRSOC will be relocated to the newly constructed facility and the current facility will be turned over to the Contractor for office use. As part of CD-1 approval, an alternative was selected on which to complete a final design by the Project Management Executive (PME) based on the Independent Analysis of Alternatives and the conceptual design conducted by the incumbent contractor. CD-1 was approved in June 2020 with a cost range of $83M -$93M. Upon completion of design, a construction contract will be awarded by DOE to complete this project in the 2026-2028 CD-1 schedule range. The Contractor will support DOE in the role of owner's representative throughout the project, conducting design reviews, and providing safety, security, and quality assurance support. The Contractor will be responsible for establishing the utilities and infrastructure required for the new facility up to the construction site boundary.

1.1.5 Other Project Activities

The Contractor shall execute other Line Item and Minor Construction Projects as authorized by DOE/NNSA. Construction projects which do not meet the definition of Capital Construction Projects are within the general scope of the Contract and shall be performed or managed by the Contractor as directed by the Government. At any time, the Government and Contractor may determine that a construction project being performed within the scope of the Contract may be suitable for performance under the EM or NNSA Capital Construction CLIN. If the parties agree that a construction project not meeting the definition of a Capital Construction Project may be performed under the EM or NNSA Capital Construction CLIN, the parties shall establish the Sub-CLIN in accordance with the terms and conditions of this Contract.

1.2. EM Capital Construction Projects

1.2.1 Security System Replacement

DOE adopted Argus as the standard security system for high security applications in 1995 and by NA-70 for NNSA in 2004. The scope of this project is to replace the existing E3S security system with the DOE Standard Argus System at SRS in the following areas: K-Area, L-Area, and the remaining portion of the Savannah River National Laboratory (SRNL) and general site areas. The project plan is to replace the existing security system in all SRS facilities with the more reliable and maintainable Argus security system. The scope includes design and installation of Argus Field Processors and Remote Access Panels,

which will replace the existing access control devices, exit pushbuttons, control units, and transponders. In addition, the SRS Security System Replacement project will convert a separate central alarm station for the site. The physical security system shall provide functionality for access control, intrusion detection, closed caption television, and alarm monitoring and assessment at the central alarm station. The work scope includes installation of new fiber backbones in each applicable area, installation of new components, re-utilization, or modifications to existing equipment (i.e., conduits, conductors, electrical and mechanical systems and components), and the dismantling and removal of equipment. Installation of the Argus physical security system will be done without interruption to site operations or the site's security posture. The Contractor will self-perform the entirety of this scope.

All activities shall be completed in compliance with SRS requirements and applicable national Codes and Standards. The functional and performance requirements are intended to be the standard set of requirements for all phases of the EM Argus Project.

This project is tailored, as allowed by DOE O 413.3, *Program and Project Management for the Acquisition of Capital Assets*, to be managed as four distinct subprojects within the overall cost range established at Critical Decision (CD)-1 of $49M to $91M. Each of four subprojects will have their own baseline, total project cost, and independent CD-2, 3, and 4 approvals. The final CD-4 approval will constitute overall project completion. The subprojects may be overlapped when funds allow, or executed in succession when resources are constrained, providing for severable scope throughout the life of the project.

The first subproject, H Area, achieved CD-4 on May 12, 2020 at a Total Project Cost of $18M. The second subproject, K-Area, has been descoped due to the upcoming SRS transition of landlord responsibilities, including transfer of ownership of K Area from DOE-SR to NNSA SRFO on October 1, 2024. The third subproject is L Area. The final subproject, Savannah River National Laboratory, and general site areas, will also be split between DOE-SR and NNSA-SRFO as part of transition. The SRNL piece will stay with DOE-SR and anticipates achieving CD-2/3 in FY 2027 and CD-4 in FY2028/2029, depending on funding availability. The Contractor will be required to enter into a Functional Service Agreement (FSA) with the SRNL contractor for the completion of the work activities as appropriate. The general site areas will become part of NNSA-SRFO's responsibility, and a new subproject scope, schedule and cost will be developed in the near future.