

Appendix 17

REV. 4

G-FSP-G-00017

**Functional Service Agreement Between
Savannah River Nuclear Solutions, LLC
and
Savannah River Remediation, LLC
Solid Waste Management**

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1.0 INTRODUCTION

This Functional Service Agreement (FSA), Appendix 17 of Memorandum of Agreement (G-MOA-G-00002), describes the service exchange between the Savannah River Site (SRS) Site Management and Operating (M&O) contractor, Savannah River Nuclear Solutions, LLC (SRNS) and Savannah River Remediation, LLC (SRR).

This appendix describes the Solid Waste Management (SWM) baseline work to be provided. Included may be programmatic responsibilities for the Site, as well as certain tasks related to monitoring program effectiveness and activities considered to be part of Site Landlord Services. Task-related activities that are requested will be documented in this FSA as defined in Contracting Officer (CO) direction to SRNS. Activities not included in the FSA will be requested by the tenant utilizing the Service Level Agreement (SLA) process. The parties agree to review this FSA periodically (not to exceed a period of two years) and revise it if changes are needed as determined by the parties.

Unless otherwise noted in this document, the services described do not apply to SWPF/Parsons.

2.0 POLICIES, PROCEDURES, AND MANUALS

The following policies, procedures, and manuals will be maintained for the Site by SRNS and will apply when services are provided:

Manual Number	Manual Title	Applicable Sections
1S	SRS Radioactive Waste Requirements	Entire Manual
3Q	Environmental Compliance Manual	Procedure 6.2, "Solid Waste Management and Disposal" Procedure 6.3, "Hazardous Waste Determination" Procedure 6.8, "Hazardous Waste Quarterly Reporting"

		<p>Procedure 6.9, “Hazardous or Mixed Waste Management Satellite Accumulation Areas”</p> <p>Procedure 6.10, “Container Usage and Disposal”</p> <p>Procedure 6.11, “Pollution Prevention Program”</p> <p>Procedure 6.20, “Metallic Lead Management”</p> <p>Procedure 6.21, “Hazardous or Mixed Waste Management at Staging Areas”</p> <p>Procedure 6.22, “Hazardous Waste Minimization Report”</p>
11Q	Facility Safety Document Manual	Procedure 1.09, “Generation, Review, Approval and Control of Radioactive Waste Management Basis”

3.0 CODES AND STANDARDS

SRNS SWM will provide solid waste disposition and associated direct support services for newly generated waste that is forecasted and approved for acceptance per generator waste quality assurance programs (e.g., waste certification) per applicable waste acceptance criteria as defined in the *SRS Radioactive Waste Requirements Manual* (Manual 1S), and in the *Environmental Compliance Manual* (Manual 3Q) Procedure 6.2, “Solid Waste Management and Disposal”.

4.0 SOLID WASTE MANAGEMENT SERVICES

To ensure sufficient capacity for disposal for each of the services below, SRR must provide a waste forecast, by waste type, in accordance with Manual 1S. Significant changes to waste forecasts should be communicated via a revised waste forecast in accordance with Manual 1S. SRR will support requests to DOE to obtain funding for waste forms not forecasted or planned in existing budgets, or for waste requiring support above the routine service and baseline funding (e.g., Performance Assessment Special Analysis, Unresolved Disposal Question Evaluation, waste retrieval, waste repackaging, waste

recharacterization, etc.). If inadequate funding is received, DOE-SR will be asked to work with the affected parties, as needed, to prioritize facility capacity usage and resources.

Services identified below are typically available Monday through Thursday from 7:00 am to 4:00 pm throughout the year, excluding Site holidays. SRNS reserves the right to suspend service coverage due to planned operational outages and unplanned constraints.

SRNS will respond to service requests from SRR or incidents within reasonable time frames to support work priorities. Likewise, SRR is expected to respond to data and support requests from SRNS within reasonable time frames to support operations, incident reporting, and corrective actions.

The SRS M&O contractor is responsible for the following Treatment, Storage and Disposal functions:

- SRNS will provide on-site disposal options for LLW in: low-activity waste vaults, intermediate-level waste vaults, slit trenches, engineered trenches, and Component-in-Grout trenches.
- SRNS may temporarily store, as facility limitations allow (e.g., available capacity, Safety Basis limitations, ALARA concerns, logistics, etc.) and as approved by SRNS management, Manual 1S compliant LLW, Hazardous Waste, PCB Waste, and Mixed Waste after agreement by both SRNS and SRR for the following conditions:
 - While determining the specific onsite LLW disposal location; or
 - While arranging for offsite shipment to the appropriate treatment, storage, and disposal (TSD) facility for LLW, Hazardous Waste, PCB Waste, and Mixed Waste.

The SRR contractor is responsible for the following generator functions:

- SRR shall provide GCO(s) to certify waste program compliance with SRS 1S Manual requirements.
 - SRR shall provide waste cognizant technical personnel.
 - SRR shall provide for facility access and program support for SWM functions, program surveillances and audits to ensure compliance with Manual 1S requirements.
 - SRR shall support audits/assessments typically consisting of SRNS led surveillances, but may require interface with off-site organizations to support RCRA compliance assessments, Nevada National Security Site waste program assessments, WIPP certification assessments, etc.
 - SRR shall provide and maintain a current and out-year forecast of waste generation in accordance with Manual 1S.
 - SRR shall reimburse SRNS when significant corrective actions are required of the SRNS due to SRR waste generator non-compliance of waste acceptance in accordance with Manual 1S.
 - SRR shall identify and implement cost-effective waste reduction projects/techniques and shall support documentation of pollution prevention program elements to comply with DOE and regulatory agency reporting requirements.
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4.1 Low-Level Waste

- Low-level Waste (LLW) Disposal Facility – SRNS provides on-site disposal options for LLW, including: low-activity waste vaults, intermediate-level waste vaults, slit trenches, engineered trenches, and Component-in-Grout trenches.
- LLW Off-site Disposal – For LLW that does not meet site acceptance criteria or for waste determined to be more appropriately disposed off-site, SRNS maintains contracts and operation support for the packaging and off-site shipment of LLW using off-site treatment and disposal facilities. Off-site disposal options include Energy Solutions, the Nevada National Security Site (NNSS) and Waste Control Specialists (WCS). An NNSS Waste Certification Program is maintained by SRNS to support the NNSS disposal option. SRR operational support is required for all LLW direct shipments from their facilities

4.2 Transuranic Waste

- Transuranic (TRU) Waste Storage Facility – SRNS provides TRU Waste Storage consisting of TRU Waste Storage Pads with and without enclosures. Resource Conservation and Recovery Act (RCRA) TRU waste is stored on South Carolina Department of Health and Environmental Control (SCDHEC) Part B permitted pads.
- TRU Waste Certification and Shipment for Disposal – SRNS maintains the interface with Central Characterization Program (CCP) for the certification, packaging, and off-site shipment of newly generated waste per Waste Isolation Pilot Plant (WIPP) WAC and TRAMPAC requirements.

4.3 Hazardous, PCB, and Mixed Waste

- Hazardous, polychlorinated biphenyl (PCB), and Mixed Waste Storage Facilities – SRNS provides permitted waste storage for Hazardous, PCB and radioactive waste with a hazardous component.
- Hazardous, PCB, and Mixed Waste Disposal – SRNS provides technical and operations support for the shipment of newly generated waste using off-site treatment and disposal facilities' services. SRR operational support is required for all hazardous and mixed waste direct shipments from their facilities.
- SRNS provides the required DOE-Savannah River (SR) approved program for the certified unconditional release of non-radioactive hazardous waste for off-site disposition.

4.4 Sanitary Waste Disposal Operations

SRNS provides program oversight, collection, and disposal of routine sanitary waste generated across the Savannah River Site (SRS). Waste acceptance is per Procedure 6.2,

“Solid Waste Management and Disposal” (Manual 3Q). SRNS provides for waste collection and transport of routine office and cafeteria waste. Generators are responsible for waste collection and transport of non-debris waste. SRNS maintains the following operations for use by SRS organizations:

- North Augusta Material Recovery Facility (NAMRF) – Funding, contract and program oversight: Routine sanitary waste (office type) is collected and transported to NAMRF to recover recyclable content.
- On-Site Construction & Demolition (C&D) Landfill – Funding and operational oversight: Debris waste that meets the C&D Landfill Waste Acceptance Criteria (WAC) is collected and transported to the C&D Landfill at the generator’s cost.
- Three Rivers Solid Waste Authority Landfill (TRL) – Funding, contract and program oversight: Provides for SRR waste generators’ use of the TRL. Generators are responsible for non-routine debris waste, special waste, special waste handling fees/services, and generator-caused corrective actions.

4.5 SRNS Waste Generator Certification, Support, and Oversight

SRNS provides the following services in support of required waste generator programs to ship waste to on-site and off-site TSD facilities:

- Provide for initial generator certification approval and periodic follow-up surveillances and audits via the SRR Integrated Independent Evaluation process.
 - Provide waste certification program maintenance and support, including waste acceptance procedure maintenance, performance indicators, and document control supporting the certification of waste received at SRS TSD facilities.
 - Provide waste characterization subject matter expertise to review and accept waste stream characterization forms and certification plans, provide dose-to-curie calculation assistance, and review and approve the periodic waste stream characterization re-validation.
 - Provide for the Solid Waste Management Committee and any needed Working Groups as a forum for waste generator input into waste program objectives and implementation strategies.
 - Provide support for special analysis of onsite TSD facilities in support of required waste generator programs. Funding, if needed, is addressed in Section 4.0.
 - Manage the program for Generator Certification Official (GCO) qualifications, curriculum and continuing training. Provide subject matter expertise to review and improve the site-level training and awareness for waste management, including training
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support for the Environmental Compliance Authorities (ECAs) and waste Cognizant Technical Functions (CTFs).

- Manage and provide pre-generation approval requests to DOE-SR for the generation of waste with no identified path for disposal (WWNPD).
- Provide SWM Generator Services support for generator waste management operations required to meet SRS waste acceptance criteria.
- Provide oversight and certification for offsite waste shipments.
- Provide for DOE required forecasting and reporting of newly-generated waste.
- Maintain site procurement specifications for the procurement and inventory maintenance of site-wide radioactive solid waste packaging, bags, and required packaging filter vents. Packaging costs are the responsibility of the waste generator.
- Maintain the Solid Waste Integrated Forecasting Tool (SWIFT) database to support generator data input required for planning disposal options and volumes of waste to be dispositioned in current and out-years.
- Maintain the Waste Information Tracking System (WITS) database to support generator data input and package and facility limit checks required for waste acceptance approval of LLW and TRU waste by SRNS SWM.
- Maintain the Hazardous/Mixed Waste Tracking (HMW Tracking) database to support generator data input and package and facility limit checks required for waste acceptance approval by SRNS SWM.
- Provide SRR access to the WITS for tracking characterization and movement of LLW and TRU waste for disposal.
- Provide SRR access to the HMW Tracking for tracking characterization and movement of Hazardous/Mixed/PCB waste for disposal.
- Provide SRR a certificate of disposal/destruction for hazardous and radioactive waste disposed off-site, if requested by SRR.
- Provide support for Site radioactive waste programs' maintenance and compliance with DOE Order 435.1.

4.6 SRR Waste Generator Certification Support

SRR compliance with the applicable waste acceptance criteria is required for access to SRNS solid waste services. All 1S Manual and 3Q Manual requirements applicable to on-site waste generators shall be met. Some key interface requirements are identified below:

- SRR shall provide GCO(s) to certify waste program compliance with SRS 1S Manual requirements. SRR shall support the GCO(s) function, as needed, with operations and cognizant technical personnel.
 - SRR shall provide for facility access and program support for SWM Generator Services functions, program surveillances and audits to ensure compliance with Manual 1S requirements. SRNS will provide advanced notice, to the extent practical, prior to any required request for program surveillances and audits.
 - SRR shall provide support required to package and load for transport any waste that will be direct shipped from the generator that is destined for offsite disposal, e.g. lab packaging.
 - SRR shall provide support for audits/assessments typically consisting of SRNS led surveillances, but may require interface with off-site organizations to support RCRA compliance assessments, NNSA waste program assessments, WIPP certification assessments, etc. SRNS will provide advanced notice, to the extent practical, prior to any required request for assessment support.
 - SRR shall invite/include SWM Generator Services personnel to participate as SME evaluators for the SRR Integrated Independent Evaluation (IIE) process whenever Functional Area (FA) 24 “Waste Management” is included as part of the IIE scope.
 - SRR shall provide and maintain a current and out-year forecast of waste generation in accordance with Manual 1S. SRR shall revise forecasted waste in accordance with Manual 1S. Based on forecasted capacity needs, SRNS will request funding from DOE. SRR will support requests to DOE to obtain funding for waste forms not forecasted or planned in existing budgets. If inadequate funding is received, DOE-SR will be asked to work with the affected parties, as needed, to prioritize facility capacity usage and resources. NOTE: Out-year budgets are developed 1-2 years in advance and forecasts should accommodate this need to the extent practical.
 - In accordance with Manual 1S, budget-significant corrective actions required of the SRNS due to SRR waste generator non-compliance of waste acceptance and shipping criteria will be reimbursed by the waste generator. Some potential examples include: special radiological Performance Assessment analysis for TSDs, waste retrieval, repackaging, re-characterization, etc. As required, DOE-SR will arbitrate cost schedules for these corrective actions.
 - SRR will provide information and data to SRNS to support DOE and regulatory reporting. Report frequency will be on a periodic basis required to support both SRNS and SRR priorities.
 - SRR shall provide for waste characterization services as needed to ensure initial and periodic verification of waste streams.
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- SRR shall not generate a solid waste with no identified path to disposal without explicit approval by DOE-SR and concurrence from SRNS.

4.7 SRS Pollution Prevention (P2) Program

SRNS will provide for a site-level pollution prevention program compliant with applicable regulations and directives as defined per Procedure 6.11, “Pollution Prevention Program” (Manual 3Q). SRNS provides the following services supporting required waste minimization programs and support for the SRS Pollution Prevention (P2) Program:

- SRNS maintains the SRS P2 Program that integrates pollution prevention into the SRS Environmental Management System (EMS) and associated Integrated Safety Management Systems (ISMSs) as a primary strategy to perform operations and closure missions in a compliant, cost-effective manner that protects the environment and safety and health of employees and the public.
- The SRS P2 Program complies with DOE and regulatory requirements, including performance measures, national and local reporting, and monitoring. SRNS provides data collection and reporting for this program.
- SRNS provides waste avoidance program support in accordance with the SRS P2 Program.
- SRNS provides SWM Generator Services support and database application to help identify and document waste avoidance opportunities.
- SRNS supports employee P2 awareness and training programs/events and community outreach to promote P2 concepts.
- SRNS will provide access to recycle services to the extent practical. Funding will be on a case-by-case basis.

SRR shall identify and implement cost-effective waste reduction projects/techniques and shall support documentation of pollution prevention program elements to comply with DOE and regulatory agency reporting requirements.

4.8 Interarea Transfer Line (IAL) and High Point Access

The Interarea Transfer Line (IAL) is the high level waste (HLW) transfer piping system that is located underground between F and H Areas in the 643-E Facility (Old Burial Grounds). A “High Point” area on this transfer line is located within the 643-7E Facility. The “High Point” and IAL are managed and operated by SRR; however, access to those areas is gained by entering the Burial Grounds which is the responsibility of SRNS SWM.

The High Point on the IAL consists of a contamination control facility, a flush water tank, and pumps. To clearly define the facility boundaries and responsibility zones, the High Point facility is marked by delineator posts and chains. Facility identification and

custodian signs are hung on the chain, identifying SRR Liquid Waste Operations (LWO) as the facility owner.

SRR LWO personnel are responsible for:

- Contacting the SWM Shift Manager directly at 507-3289 prior to commencing any transfer. Contacting the SWM Shift Manager should be done during normal working hours prior to commencing a transfer.
 - Remaining in radio contact with the SWM Shift Manager when inside the SWM facility controlled areas to include the High Point.
 - Maintaining demarcation signs and other facility identification at the High Point, such that facility boundaries and responsibility zones are clearly identified.
 - Providing oversight and response to all emergencies, as addressed in Manual 6Q, occurring at the High Point facility or IAL. The F-Tank Farm (FTF) Shift Manager will act as the Facility Emergency Coordinator (FEC) for any event occurring at the High Point.
 - Providing immediate notification to the SWM Shift Manager, during normal working hours of all emergencies at the High Point, regardless of the nature or severity and informing SWM management of any off-shift emergencies at the High Point.
 - Developing and executing drill scenarios for the High Point that may involve SWM response.
 - Providing oversight of ORPS occurrences or issues within the High Point facility, including critiques, reporting, and investigations. Note: Exceptions are addressed in Manual 9B.
 - Providing support for all Radiological work and incidents at the High Point facility.
 - Responding to incidents (i.e., personnel contamination, leaks, spills, etc.) during weekend surveillance during off-shift hours within SWM involving HP/IAL.
 - Providing personnel decontamination.
 - Providing work permits for all radiological work at the High Point.
 - Returning any borrowed equipment, vehicles, tools, etc., to original location, in same condition as received. (i.e., vehicles cleaned out, gassed, etc.).
 - Maintaining the cleanliness, appearance, and safety of the High Point facility.
 - Contacting SWM Shift Manager to add High Point work scope items to SWM schedules, when necessary to insure interface communications are maintained.
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- Providing oversight of work control activities within the High Point facility, including work package development and approvals. Also, upon arrival at SWM, notifying the Shift Manager or delegate of planned work activities prior to entering the facility.
- Notifying SWM Shift Manager for emergent issues and providing response as requested. Note: If immediate communications are required for emergent issues, the Shift Managers should speak directly. Per EPIP and 2S Con-Ops practices, all communications involving facility operations (non-emergent and emergent) should go through the Shift Manager.

SRNS Solid Waste Management personnel are responsible for:

- Notifying SRR LWO Manager prior to commencing any encroaching excavation that is within 6 feet of the IAL.
 - Logging the notification of an interarea transfer in the Shift Manager's logbook when notified by LWO.
 - Providing initial response to emergencies occurring at the High Point or IAL with appropriate protective actions.
 - Providing prompt radio notification to LWO personnel within SWM or at the High Point, and the LWO FTF Control Room of emergency conditions occurring within the SWM facility and required protective actions to be taken.
 - Participating in High Point drills, real and simulated, as required.
 - Promptly notifying the LWO personnel of any operating impacts that can affect the High Point or IAL (i.e., fires, loss of area power, security, etc.).
 - Providing initial Radiological Protection Department (RPD) coverage for incidents at the High Point until relieved by LWO personnel during normal working hours.
 - Serving as custodian of all equipment, vehicles, tools, etc., located within the SWM facility and outside the High Point demarcation.
 - Granting permission to FTF personnel, on a case-by-case basis, to use equipment.
 - Providing prompt notification to FTF Manager of any activity that may impact the High Point facility or IAL access or operations (e.g., environmental restoration closure cap work and culvert replacement).
 - Providing oversight of work control activities within the SWM facility, excluding the High Point facility.
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4.9 SWM Facility Entry/Training Requirements

SRR personnel are responsible for:

- Following SWM facility entry and accountability requirements.
- Scanning in and out of the SWM facility accountability system during normal E-Area operating hours. (Note: If the system is down, a sign-in log is available).
- Meeting all radiological entry and work requirements. A standing or job-specific Radiological Work Permit (RWP) will cover F-Tank Farm personnel once inside of the High Point facility.
- Obtaining a radio capable of communicating with the SWM Shift Manager/Communications Center while within SWM facility. Note: The primary radio frequency used within the SWM facility is Radio Channel 1.

NOTE: The SWM facility perimeter fence is normally locked during off-shift hours. SRR FTF Shift Managers are provided with a key to the perimeter fence. During off-shift hours, the FTF Shift Manager is to ensure all SRR personnel dispatched to SWM maintain radio communications with the 2F Control Room. The FTF Shift Manager is responsible for the accountability of people dispatched from SRR to SWM.

SRNS SWM personnel are responsible for:

- Notifying FTF personnel regarding any changes pertaining to SWM facility entry or exit requirements (e.g., location of personnel monitoring equipment, procedures for access and accountability).

5.0 INTERFACE CONTROL INFORMATION

There are no system boundary interface points (i.e. electrical or liquid systems) for solid waste disposal operations. However, there are four areas of interface that are addressed below.

SRNS shall not commence any encroaching excavation at the IAL (encroaching excavation distance is 6 feet or less) without approval from SRR. SRR shall only access SRNS E-area facilities per interface controls identified above for IAL operations (section 4.8).

Protocol for communications between SRNS and SRR regarding waste shipments or associated issues should be from the SWM Shift Operations Manager or designee to the SRR Waste Program Manager or designee.

This agreement works in conjunction with G-FSP-G-00010 Project Management & Construction Services (PM&CS) Functional Services for the disposition and recycling of the various materials using on-site facilities operated by Construction Services.

6.0 SERVICE UNIT INFORMATION

For SRR, see the Section 6 and Attachment 1 of the MOA (G-MOA-G-00002).

7.0 POINTS OF CONTACT

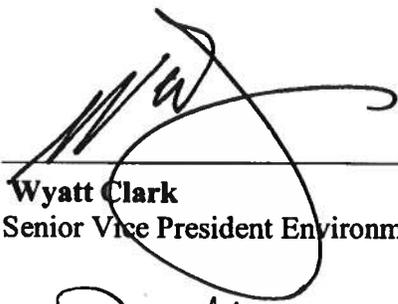
Both parties shall assign a POC who will be responsible for coordinating and administering all matters related to this agreement. All requests for services shall flow through these POCs (or their functional designees). The POCs for this agreement are:

SRNS: Kerri Crawford, Manager Solid Waste Programs

SRR: Scott Kirk, Manager Environmental Compliance

8.0 APPROVALS

SRNS:

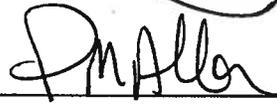


Wyatt Clark
Senior Vice President Environmental Management

1/9/19

Date

SRR:



Patricia Allen
Director ESH&QA and Contractor Assurance

1/18/19

Date