
APPENDIX 8

REV. 4

G-FSP-G-00008

**Functional Service Agreement Between
Savannah River Nuclear Solutions LLC
and
Savannah River Remediation LLC**

Analytical Services

September 12, 2014

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1.0 INTRODUCTION

This Functional Service Agreement, Appendix 8 of Memorandum of Agreement (G-MOA-G-00002) describes the service exchange between the Savannah River Site (SRS) Site Maintenance and Operations (M&O) contractor, Savannah River Nuclear Solutions LLC (SRNS) and Savannah River Remediation LLC (SRR).

Unless otherwise noted in this document, the services described do not apply to SWPF/Parsons. Any services provided to SWPF/Parsons will be executed via Service Level Agreements (SLAs) managed by SRR.

This appendix describes the baseload work to be provided by SRNL which is operated by SRNS. Included as part of baseload activities are programmatic responsibilities for the Site, as well as, certain tasks related to ensuring/interpreting program effectiveness and activities considered to be part of Site Landlord and Site Services. Task-related activities outside of the agreed upon services documented in this FSA will be documented as part of the Service Level Agreements (SLAs).

The parties agree to review this FSA at least annually and revise it if changes are needed as determined by both parties.

The document also includes limited analytical and maintenance services provided by SRR to SRNS facilities. SRNS and SRR are referred to collectively as the "Parties". This appendix does not address the analytical services provided by the Environmental and Bioassay Laboratory (EBL) in support of general site programs such as Industrial Hygiene (non-radiological samples), Environmental Monitoring, Bioassay, and Calibration Services. These analytical services are covered in the Environmental, Safety, Health, and Quality Assurance Programs appendix. It does cover analytical services that are provided in support of specific SRR facilities for samples that are not mandated by the general site programs.

1.1 Glossary of Terms & Acronyms

AL	Analytical Laboratories
DOE	U.S. Department of Energy
DWPF	Defense Waste Processing Facility
EBL	Environmental and Bioassay Laboratory
ETP	Effluent Treatment Project
FHL	F/H Laboratory
FP	Functional Paper
IDMS	Isotope Dilution Mass Spectrometry
MOA	Memorandum of Agreement
S/RID	Standards/Requirements Identification Document

SRNL	Savannah River National Lab
SRNS	Savannah River Nuclear Solutions (M&O Contractor)
SRS	Savannah River Site
TFL	Tritium Facilities Laboratory
SLA	Service Level Agreement
SRR	Savannah River Remediation (SRR) LLC (LW Contractor)

2.0 POLICIES, PROCEDURES, AND MANUALS

2.1 Assumptions

SRNL will provide analytical/emergency response service to SRR based on the following assumptions:

- SRNL and SRR will utilize appropriate Standards/Requirements Identification Document (S/RID) quality assurance processes to ensure sample results reported to the other Party are accurate, traceable, and compliant with data quality objectives (including those to support Documented Safety Analysis requirements, where applicable).
 - SRR will provide an annual sample forecast for each operating facility prior to the start of the budget cycle for each fiscal year (typically by July 1st, to support the ensuing FY budget planning process); the forecast will include the monthly determinations that are anticipated for each specific type of analysis. Sample determinations are the number of results that will be reported for each analysis (for example, the U IDMS Waste Tank analysis yields two determinations).
 - SRR will provide periodic updates of the forecast during the fiscal year as requested by Analytical Laboratories (AL) and the SRNL Controller organization.
 - SRR will provide written notification of any planned significant greater than or less than 20% change in the number of quarterly sample determinations. SRNL will be informed of planned significant increases or decreases in sample forecasts.
 - SRNL will provide SRR a cost for services at the beginning of each fiscal year based upon forecasted sampling needs.
 - SRNL will provide SRR with a monthly summary of the analyses/determinations performed.
 - All analyses will be based upon an SLA.
 - SRNL will notify SRR if any significant cost increase occurs, in addition, SRNL will provide a Quarterly Cost Forecast.
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2.2 References

Memorandum of Agreement between Savannah River Nuclear Solutions, LLC and Savannah River Remediation LLC for the Performance and Payment of Support Services, G-MOA-G-00002.

Manual E7, "Conduct of Engineering"

Manual L3.26, "Conduct of Analytical Measurements" (see Insite at <http://dcrweb.srs.gov/dcr/DCRWeb.nsf/AnalabProcedures2?openagent&L3.26-TOC>)

Functional Service Agreement for Environment, Safety, Health, Quality and Health Services between SRNS and SRR, G-FSP-G-0006

Functional Service Agreement for Liquid Waste Receipt Services between SRNS and SRR, G-FSP-G-00019

The following policies, procedures, and manuals will be maintained for the Site by SRNL and will apply when services are provide

Manual Number	Manual Title	Applicable Sections
L3.26	Conduct of Analytical Measurements	All
L2-1	Central Lab Multigroup Procedures	L2-1-00047, L2-1-00108 & L2-1-00046
L3.05	Instrumental Analysis Procedures	L3.05-10111, L3.05-10113, L3.05-10115, L3.05-10125, , L3.05-10132 & L3.05-10134
L3.06	Process Control Procedures	L3.06-00021, L3.06-00022, L3.06-00023, L3.06-10005, L3.06-10006, L3.06-10012, L3.06-10020, L3.06-

		10026, L3.06-10059, L3.06-10085, L3.06-10100, L3.06-10122, L3.06-10123, L3.06-10133, L3.06-10137, L3.06-10144, L3.06-30015, L3.06-30026, L3.06-50014 & L3.06-50015
1Q	Quality Assurance Manual	2-2, 2-7, 12-1, 15-1, , 17-1 & 20-1
1B	Management Requirements and Procedures	4.23

3.0 CODES AND STANDARDS

Analytical Laboratories conducts its analytical laboratory business consistent with the key elements identified within ANSI N15.41, "Derivation of Measurement Control Programs – General Principles", 1984 and within ANSI N15.51, "Measurement Control Program – Nuclear Materials Analytical Chemistry Laboratory", 1990.

4.0 ANALYTICAL SERVICES

4.1 Analytical Services

The following Analytical Services are provided currently by SRNL to SRR. Any specific tasking will be authorized through an SLA.

Analytical Services					
Service	SRR Facility				
	S-Area DWPF	MCU	F Tank Farm	H Tank Farm	ETP
Corrosion Control			X	X	
Evaporator Feed Qualification			X	X	
Process Control/Waste Acceptance		X	X	X	
Industrial Hygiene Samples	X	X	X	X	X

4.1.1 Corrosion Control

SRNL will perform analytical services on samples needed to support the corrosion control program in the F and H Tank farms, as requested by SRR.

4.1.2 Evaporator Feed Qualification

SRNL will perform analytical services on samples needed to qualify waste feed to the evaporators in F and H Tank farms as requested by SRR.

4.1.3 Process Control/Waste Acceptance

SRNL will perform analytical services on samples required to operate the modular caustic-side solvent extraction (MCU) process, as requested by SRR.

4.1.4 Industrial Hygiene Samples

SRNL will perform analytical services on samples needed to monitor non-radioactive contaminants, as requested by SRR. SRR will sample and deliver to EBL non-radiological samples that are not managed through the Site industrial hygiene program.

4.2 Additional Analytical Services

The following additional analytical services are provided by SRNL to SRR:

Additional Analytical Services					
Service	SRR Facility				
	S-Area DWPF	MCU	F Tank Farm	H Tank Farm	ETP
Special Samples	X	X	X	X	X
Radiological Investigative Samples	X	X	X	X	X
Facility Environmental Samples	X	X	X	X	X
Technical Consultation	X	X	X	X	X

4.2.1 Special and Radiological Investigative Samples

SRNL will perform incremental analytical services on special samples needed to study the process, evaluate proposed process changes, benchmark analytical capabilities at F/H Laboratory (FHL) and SRNL, or diagnose process upsets in SRR facilities as requested by SRR. Radiological investigative samples are periodically submitted to ascertain the identity and activity of contamination on personnel, equipment, or facilities.

4.2.2 Facility Environmental Samples

EBL will perform analyses on environmental samples that are collected to characterize/diagnose discharges from operating facilities, as requested by SRR. These samples are not managed as part of the Site environmental monitoring program.

4.2.3 Technical Consultation

SRNL and SRR will provide technical consultation to the other Party on an as-needed and as-available basis. Consultation may be in the form of investigating discrepancies between reported and expected analytical results. It also may include technical support for resolving process abnormalities and supporting

initiatives such as campaigns for process or analytical readiness. Each Party must request this incremental service from the management of the technical resource.

4.3 Non-Routine Services to SRNL

The following analytical/maintenance services are provided by SRR to SRNL:

Analytical/Maintenance Services				
Service	SRNL Facility			
	Process Facilities	FHL	EBL	TFL
Technical Consultation		X	X	X
ETP Lab Analytical Support	X			
Special Samples	X	X	X	X
Maintenance/Camera Support		X	X	X

4.3.1 ETP Lab Analytical Support

The analysis of SRNL Waste Acceptance Compliance and/or special samples may be performed at the Effluent Treatment Project (ETP) Laboratory.

4.3.2 Special Samples

Backup (emergency) analytical service [e.g. diesel fuel for FHL].

4.3.3 Maintenance/Camera Support

- Defense Waste Processing Facility (DWPF) Maintenance support for activities that require specialized training, expertise, and/or certification, such as the welding of drain lines
- Camera Crew support for surveillance/inspections that require specialized equipment, training, and/or expertise such as the remote examination of drain lines or tanks

5.0 INTERFACE CONTROL INFORMATION

5.1 Performance Requirements

SRNL will own, operate and maintain all analytical equipment and processes as well as the facilities needed to house and support the equipment and staff. SRNL will serve as Design Authority of the equipment and systems.

5.1.1 Data Quality Objectives (DQOs)

Current analysis methods have been negotiated between the Parties and documented in reports (e.g., Feasibility Reports). For new methods or new data quality objectives (DQOs), the Parties will follow the process outlined below in Section 5.1.6, Service Requests.

5.1.2 Turnaround Times (TATs)

For current methods, these have been negotiated between the Parties and are published on the Analytical Labs Home Page under 'Customer Topics.' For new methods, the Parties will follow the process outlined below in Section 5.1.6, Service Requests.

5.1.3 Service Measurement

FHL Analytical Services are provided as requested and are charged based on actual sample determinations and a complexity factor as recorded in Laboratory Information Management System (LIMS). Sample determinations are updated on a monthly basis.

5.1.4 Service Level Report

This report reflects the actual number of determinations performed for each facility as generated by a LIMS query.

5.1.5 Service Availability

FHL provides analytical service for SRR samples 24 hours daily, 7 days a week, including site holidays. SRR samples shall be delivered to 772-1F Sample Receiving via the sample tunnel. EBL typically operates normal business from 6:30 am to 4:30 pm U.S. Eastern Time, Monday through Friday, except site holidays. Exceptions for overnight and weekend coverage are made on a case-by-case basis.

Any planned evolution that will (or possibly could) affect the availability of analytical services will be preceded by notification to and authorization from the impacted facility. The notification shall be at least 24 hours in advance of the activity.

SRR should plan on SRNL-FHL being unavailable due to operational and maintenance upgrades for two weeks each year. The scheduled outage would typically span two weeks. The exact dates and duration for any outages will be negotiated between the Parties. FHL normally schedules its outage to coincide with the SRNS-wide outage.

Coordination of outages will be executed through the facility managers of FHL and EBL and the POC for each SRNS and SRR facility who submits samples to the laboratories. Both Parties will demonstrate a good faith effort concerning coordination of scope (i.e., outages).

Any unplanned event affecting the availability of analytical service will be followed as soon as reasonably possible with a notification to the affected facility.

5.1.6 Service Requests

SRNL will normally provide results associated with routine SRR analytical service within the mutually-agreed turnaround time. If routine samples cannot be analyzed

within the negotiated turnaround time, SRNL will notify the SRR facility prior to the expiration of the turnaround interval and inform the facility of the anticipated reporting time. Questions about routine analytical services at FHL can be directed through Sample Receiving personnel at 952-4148. Questions about routine analytical services at EBL can be directed to the lab manager at 952-7236.

Emergent analytical work with a significant increase above annual baseline, i.e. >20% and/or work requiring new analytical methods desired by SRR will be requested as described in Manual E7, Procedure 2.02. SRR will use the New Analytical Service Request (NASR) within Lotus Notes to request new or modified analytical services. SRR will comply with appropriate sections of Manual L3.26, "Conduct of Analytical Measurements."

SRR will provide a detailed work scope in the NASR that includes the number of samples to be submitted, the parameters to be measured, the matrix (composition) of the sample, the desired DQOs (expected range, detection limit, method uncertainty, how the results will be utilized in the facility, etc.), and the desired turnaround time. SRNL will review the emergent work request and provide a feasibility response, with cost estimate, to SRR. If SRR approves the response and authorizes SRNS to proceed with the scope of work, SRR will ensure that an SLA is established or revised to provide the funding identified in the feasibility response.

In some cases, SRNL will waive the need for a NASR. For example, a request for an occasional special sample or for limited technical consultation to assist with method development, instrument troubleshooting, or assessments may be directed to laboratory management via electronic mail. Upon laboratory management approval, this level of effort can be completed with the cost charged to an SLA already established by SRR for incremental services. Any incremental services provided by SRR to SRNS will be covered by this same protocol.

All emergent work will be prioritized and scheduled to meet the needs of SRR and other laboratory customers.

5.2 Additional Requirements/Responsibilities

5.2.1 Sample Containers

SRNL will be responsible to procure and maintain a sufficient inventory of all sample containers (including doorstops, stainless steel sample vials, and peanut vials). SRR will order from the SRNS inventory all supplies required to sample tanks. SRNL FHL is responsible to de-contaminate doorstops and return them to the SRR sample truck driver for re-use. Turnaround of doorstops will be prioritized and scheduled to meet the needs of SRR and other laboratory customers.

5.2.2 Waste Handling

Based on current sample types, SRNL will be responsible to dispose of all routine excess samples and any liquids generated by processing SRR samples at FHL and EBL. For future sample types, both parties must agree if an exception to the current method of waste disposal is contemplated.

5.2.3 Radiological Control Operations and Health Physics Support

SRR will provide the Radiological Control and Health Physics Support necessary to collect, package, and transport samples to the laboratory facilities. SRNL will provide the Radiological Control Support to off-load sample containers from the SRR sample truck and to process the samples, including generated waste streams, once inside the lab facility.

5.2.4 Impacts on FHL Safety Basis

SRR will notify SRNL in writing of any additions of new chemicals or other process changes that could affect the composition of samples submitted to FHL. This information will be utilized by FHL to determine if the change has any impacts on the FHL Safety Basis authorization and/or changes in the sample composition which might require additional waste characterization.

6.0 SERVICE UNIT INFORMATION

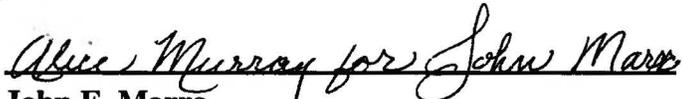
For SRR, see Section 6 and Attachment 1 of this MOA (G-MOA-G-00002)

7.0 POINTS OF CONTACT

SRNL: Curtis W. Gardner

SRR: David J. Martin

8.0 APPROVALS

SRNS:	 John E. Marra	<u>September 12, 2014</u> Date
SRR:	 K. Fortenberry	<u>9-12-2014</u> Date