

INNOVATION • DEFENSE  
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**We make the world safer.**

# SRNS Fall 2023 Update

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EVP and NNSA COO, Savannah River Nuclear Solutions

*Governor's Nuclear Advisory Council, October 2023*

6,700 Employees *“Making the world safer.”*



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**HILL**



## Savannah River Site Aiken, S.C.

310 square-mile site  
12,700 employees



**\$2.7**  
billion

**SRNS Budget**

## MISSION AREAS



**Environmental Stewardship**  
for soil, water and facilities



**Nuclear Materials for National Security**  
for nuclear weapons deterrent



**Securing Nuclear Materials**  
to prevent unwanted proliferation



**Transforming Nuclear Materials**  
into assets and stable wasteforms



**M&O Support Services**

# SRNS Missions

EM



NNSA



## Environmental Management

- Management, stabilization and disposition of nuclear materials
- Management and disposition of solid, liquid and transuranic wastes
- Spent fuel management
- Environmental remediation and cleanup

## National Nuclear Security Administration

- Tritium operations
- Nonproliferation support
- Foreign fuel receipts
- Surplus Pu Disposition
- Pu Modernization
- SRPPF Project
- Tritium Finishing Facility

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# SRS Landlord Transition Plan

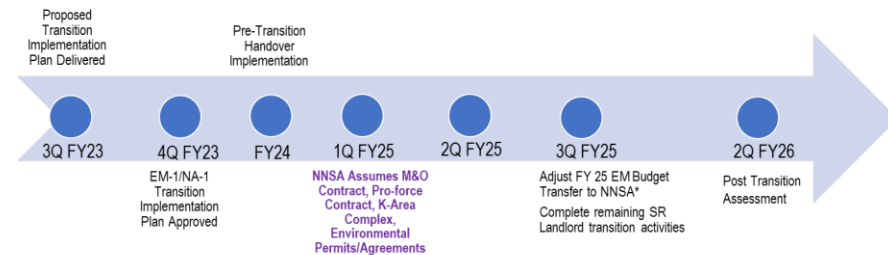


EM and NNSA worked collaboratively to prepare a landlord transition plan to accomplish a seamless SRS transition with fairness and continuity for on-going programs.

## The Plan includes the following:

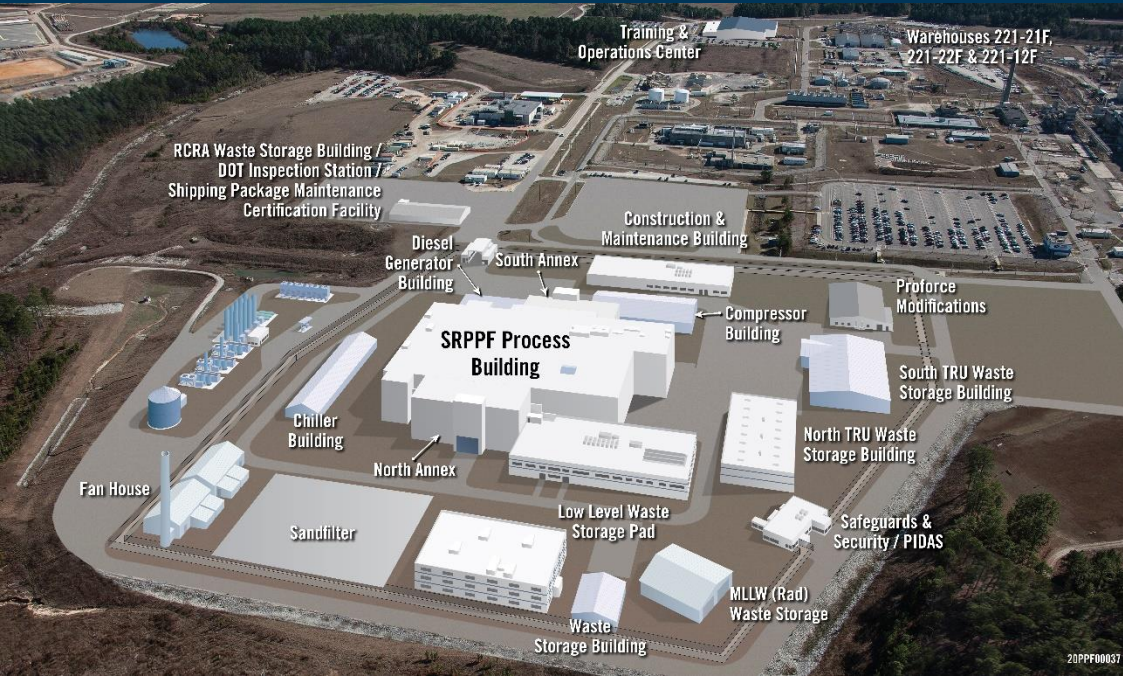
- Transfer of four major responsibilities from SROO to NNSA:
  - Management and Operating (M&O) contract, including Landlord and Essential Site Services (ESS)
  - Protective Force Contract
  - K Area Complex (KAC)
  - Environmental Permits / Agreements
- Accounts for responsibility and management of functions transferring from SROO/EM to SRFO/NNSA at SRS
- Supports NNSA assumption of primary site management responsibility and budget authority by functions in FY25 and accomplishes Landlord transition on October 1, 2024 (FY25)

## SRS Landlord Transition Milestones





# SRPPF Pit Production Update



- **Repurposing a seismically-qualified structure**
  - 400,000 square feet of Hazard Category-2 space
  - Interior walls of reinforced concrete for personnel shielding and durability for 50-year facility design life
- **FY23 and FY24 work focused on:**
  - Achieving 60% design complete milestone
  - Removing unnecessary walls and equipment from existing 226-F structure
  - Procurement of gloveboxes (~\$1.2B total spend) and other critical long lead items
  - Site prep and early construction work packages
- Recently awarded a Construction Management (CM) subcontract to Fluor Federal Services. As the CM subcontractor, Fluor will utilize its significant Engineering, Procurement, and Construction experience to promote efficiency and ensure continuity through project completion

# Pit Production Program Staffing



## *Engineers*

- Chemical
- Mechanical
- Electrical
- Civil
- Environmental
- Criticality
- Info Systems
- Metrology
- Electrorefining



## *Maintenance*

- HVAC
- Mechanics
- Rigging
- Electrical



## *Operations*

- More than 1/3 of total staff
- High precision machining
- Welding



## *In-House Laboratory*

- Analytical Chemistry
- Materials Characterization



## *IT and OT*

- Engineers
- Technicians
- Computer Analysis
- Cybersecurity
- Automation
- Network Architects
- Database Designers



## *ESH & QA*

- Industrial Hygiene
- Safety & Health
- Rad Control
- Quality Assurance



## *Training and Procedures*

- Engineering
- Maintenance
- Operations
- Laboratory
- IT / OT
- ESH
- QA

# ~1,800 Employees

Over half are non-exempt, open to personnel with associate degrees, certificates or other non-baccalaureate qualifications

# Surplus Plutonium Disposition Mission



- SRS exceeded its FY23 downblend target by 11% completing 111/100
- Began shipments from K Area to WIPP
- SRS completed 13 out of 15 planned shipments to WIPP in FY23
  - Lower than expected caused by WIPP pause due to non-SRS related issue
- SPD Project to expand capability 99% complete with design
- Fabrication of first glovebox completed







**ABD**  
Accelerated  
Basin  
De-inventory



## Innovative Approaches to Nuclear Materials Challenges

- H Canyon accelerating spent fuel dissolution and direct discard to high level waste tanks
  - Due to ABD mission, H-Canyon successfully transferred 400kgs of Uranium to High-Level Waste tanks
- New Fast Critical Assembly mission using electrolytic dissolver (2024)
- High Assay Low Enriched Uranium (2025)
- Non-Aluminum Spent Nuclear Fuel (2026)
- Ongoing domestic and foreign fuel receipts in L Area



# FY 23 SRNS Small Business Impact



**\$223,728,223**

**Total Commitments  
to local small businesses**

**\$708,975,847**

**Total Commitments  
to small businesses**

## Percentage of Commitments

Local

**23.3%**

Total

**63.8%**



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