Savannah River National Laboratory

We put science to work.™

SRNL Overview

Sharon Marra
Deputy Director, Chief Operating Officer

April 2022

Savannah River National Laboratory

Extracted from Site Management and Operating Contractor under new Contractor – June 2021

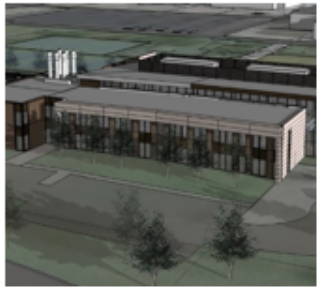
- Evolving emphasis on environmental remediation, tritium processing and nonproliferation.
- Strong efforts to share expertise beyond SRS.

- Recognized expert in environmental technologies.
- Emphasis on advanced manufacturing for DOE and NNSA missions.

Cold War | **SRS Clean Up** | **Multi-program** | **Lead Lab EM & LM**

- Established in 1951.
- R&D for the production of nuclear materials needed for weapons – primarily tritium and plutonium-239.

- National Laboratory.
- Growth of National Security and Materials Science programs.
- Focus on deployable solutions.



Fundamental and Discovery Science

BSRA
Battelle Savannah River Alliance, LLC
BATTELLE

SRNL Management & Operations: University Partners

South Carolina
CLEMSON UNIVERSITY
SC STATE UNIVERSITY 1896
Georgia Tech
UNIVERSITY OF GEORGIA

South Carolina State University is the First HBCU Management Partner of any National Laboratory

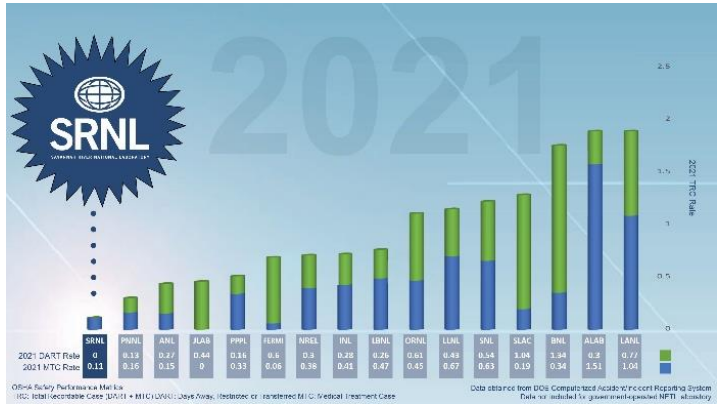
LONGENECKER & ASSOCIATES
TECHSOURCE A Science & Engineering Consultancy

Simultaneous Excellence

Meet our Nation's and our customers' needs through outstanding research

Effectively execute our mission in a safe, secure, and efficient manner

Lead by example of service to our communities: our Laboratory, our Profession, and our Region



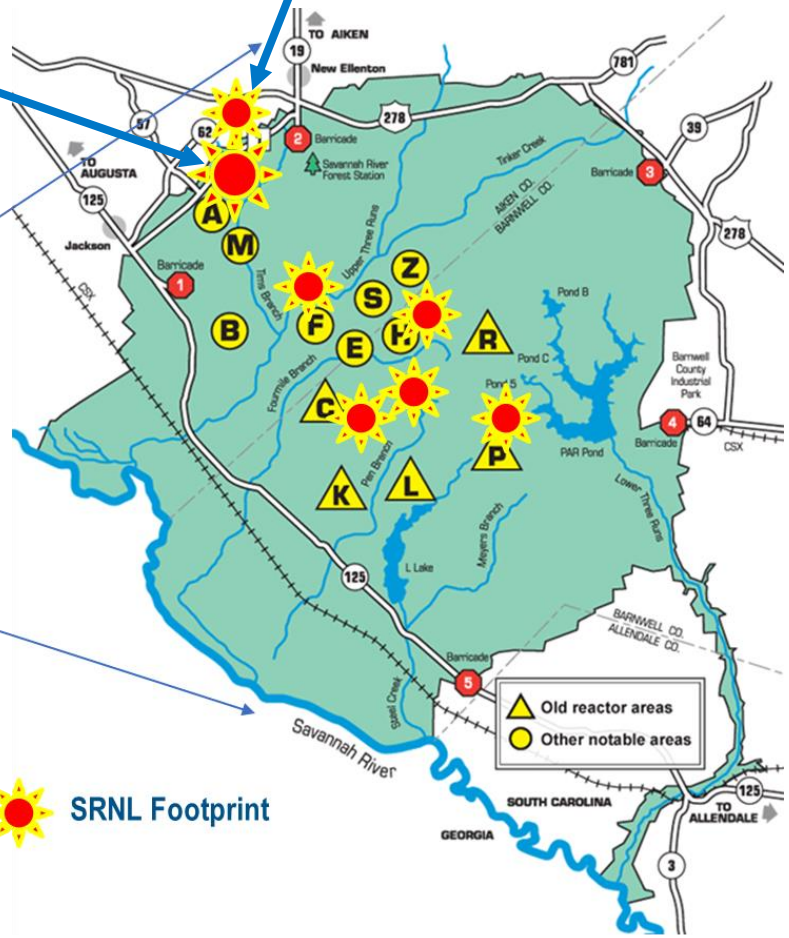
Excellence in Community Service

- Team SRNL at American Heart Association CSRA Heart Walk
- UAV Team with South Aiken High School Students
- SEED Event

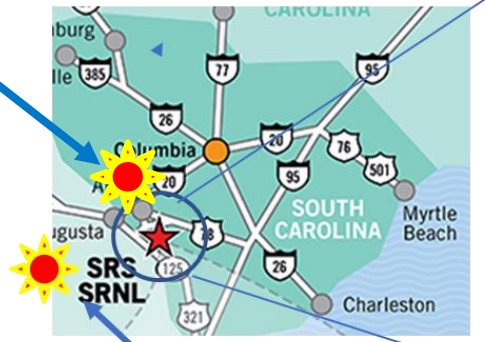
Job Shadow Day 2022

Where We Are Located

Aiken County Leased Facilities



Future- Advanced Manufacturing Collaborative at USC-Aiken



University Partner Collaboration

Georgia Cybersecurity Center

SRNL Footprint

Our Vision is Focused on Three Mission Outcomes Enabled by a Workforce Development Initiative

Environmental & Legacy Management

Environmental & Legacy Management
Provide risk-informed approaches that achieve sustainable regulatory end-states.

National Security

National Security
Enable NNSA success by supporting a robust weapons stockpile while reducing threats through advances in proliferation detection technologies.

Science & Energy Security

Science, Engineering, & Energy
Develop environmentally responsible and secure energy strategies through advanced engineering of materials & chemistry.

Workforce Development

Workforce Development
Deliver the intellectual resources needed to execute the vision for the nation.

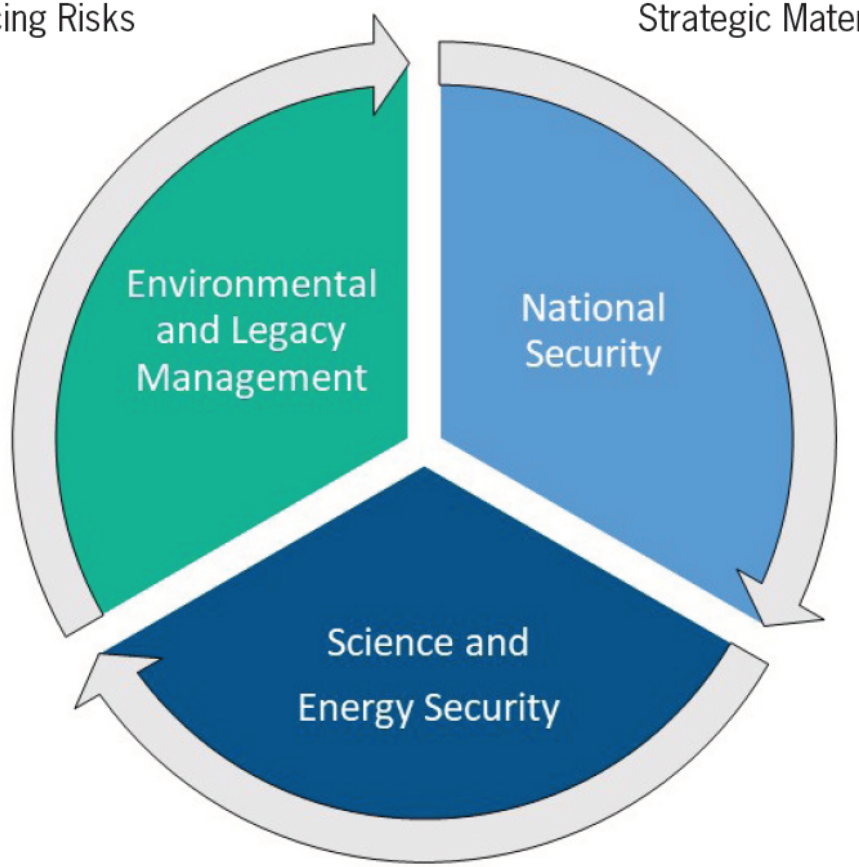
We Protect Our Nation by Applying Science to the Environment, Energy, National and Global Security Problems

SRNL's Three Mission Areas and Seven Core Competencies Provide Solutions for DOE and Other Strategic Partners

Accelerating Remediation, Minimizing Waste and Reducing Risks

Assuring Production and Supply of Strategic Materials and Components

Enabling Next-generation Nuclear Materials Processing and Disposition



Sensing, Characterizing, Assessing, and Deterring Nuclear Proliferations

Creating Manufacturing Solutions for Environmental Management, National Nuclear Safety Administration, and Energy Security

Securing Connected Controls Systems and Associated Data

Engineering New Materials and Their Applications with Data-driven Modeling and Simulation

Unique Capabilities

Radiological Evidence Examination Facility

- Unique capability designed for forensic analysis of contaminated evidence
  - Traditional and nuclear forensics
- Full-scale training for contaminated evidence collection
- Post-blast investigative training
- FBI certified laboratory

Atmospheric Data Stations and Modeling

- Atmospheric research, technology development, and operational support for the U.S. Department of Energy and other federal agencies
- Emergency response, international nuclear nonproliferation, climate change, and renewable energy

Underground Counting Facility

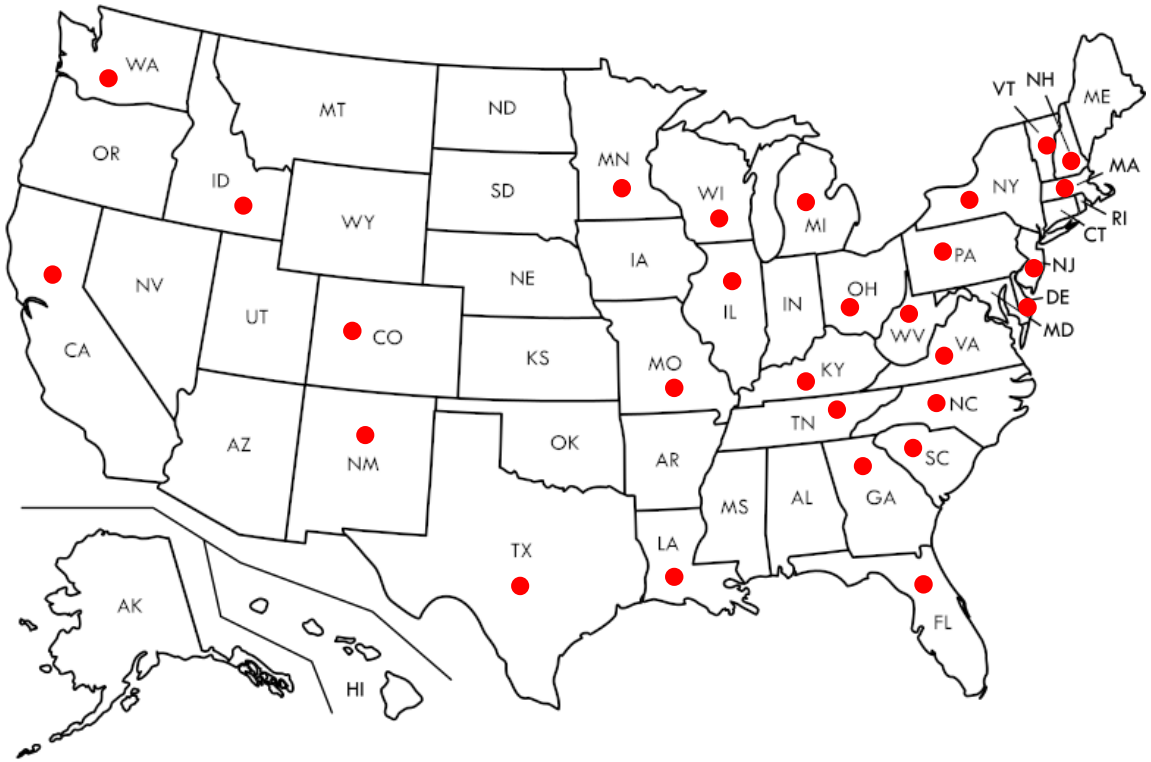
- Located 50 feet below ground level
- Has 4-inch-thick walls of pre-nuclear weapons era steel
- Highly sensitive measurements of ultra-low amounts of environmental radioactivity free from interference by background radiation
- Allows for low-noise nuclear measurements

Shielded Cells

- Provides the ability to safely work with a wide variety of highly radioactive materials in support of nuclear technology development
- Sixteen 6x6-foot workstations, or cells, that feature exterior walls made of 3-foot-thick, high-density reinforced concrete with a 1/8-inch-thick stainless-steel liner

SRNL as an Economic Engine

- ~$400M operating budget
- ~1100 Employees
- ~300 additional contract/support personnel
- Recent hiring data summary:
  - ~300 new hires over the past 26 months from multiple locations across the country
  - Increasing number of post doctoral researchers
  - Expanding intern/student program in conjunction with University partners
- Management of Minority Serving Institutions Partnership Program for DOE-EM
  - Recently expanded to include post doctoral researchers
- Construction of Advanced Manufacturing Collaborative will enable increased engagement with industry and academia to develop technology advances in support of DOE and NNSA missions



SRNL retirees predominantly stay in the area.