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Enterprise•SRS

Solving Global Challenges

Nuclear Knowledge for the Nation

Dr. David Moody

Manager, Department of Energy-Savannah River



Savannah River Site Citizen Advisory Board

March 26, 2012

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Enterprise SRS: Nuclear Knowledge for the Nation

**Environmental
Stewardship**



Clean Energy



National Security



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Our Nation and the World are Facing Complex Challenges

- Safe clean energy.
- Safeguarding and securing nuclear materials.
- Maintaining our national security.
- A clean environment.
- Leveraging science, innovation and technology.



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We are the Answer

Today, we receive, accept, secure, analyze, package, process and disposition nuclear materials. We are demonstrating “Nuclear Knowledge for the Nation” on a daily basis. And, our future is based largely on our ability to excel at it today.

Enterprise-SRS is a vision for our future.
It's about creating a sustainable future for SRS.

Who's responsible for its success?
We all are.

We have to believe in the vision.
We have to be top performers.

We want to see us succeed.
We want to see SRS renew its status
as a valuable national asset.

I have one question for you.

Are you with us?

Dr. David Moody
Manager, DOE Savannah River

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We are the Answer

Simply put, SRS can take the worry out of managing these complex issues because of our knowledge and assets.



“In a sense, E·SRS is a roadmap to the future that leverages the enterprise value of SRS and renews the SRS reputation and operating culture as a valuable national asset.”

Doug Dearolph

NNSA Savannah River Site Office Manager

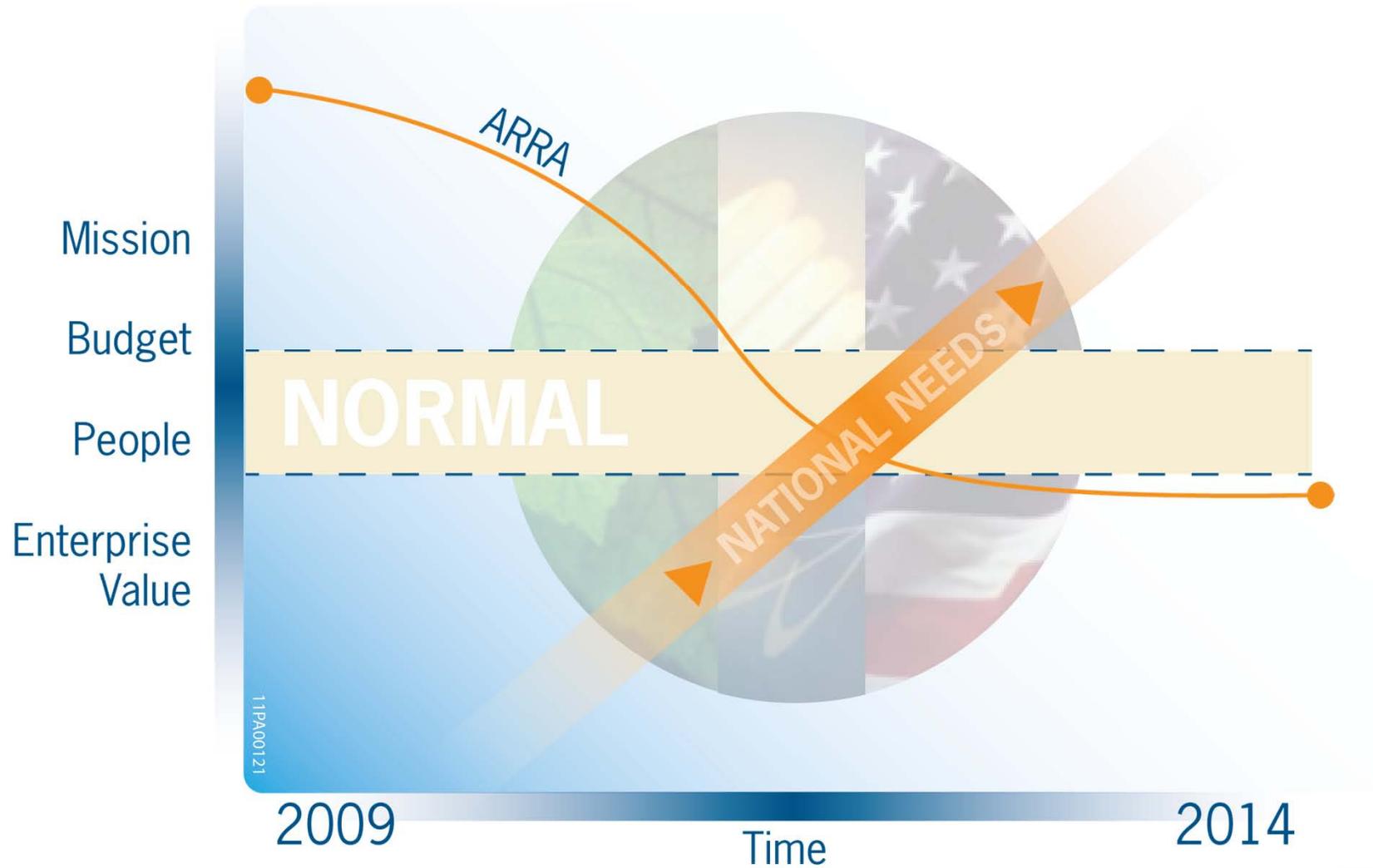


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What is E•SRS?



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Enterprise SRS: Goals and Objectives

Environmental Stewardship



Transform liabilities to assets

to reduce the environmental legacy of nuclear materials and radioactive waste at SRS to provide innovative approaches that advance and improve SRS processing leverages solutions to other DOE sites and customers

- *Lead development, validation and assessment of breakthrough technologies to accelerate current DOE national cleanup priorities*
- *Capitalize SRS competencies to solve the nation's nuclear materials disposition issues*



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Enterprise SRS: Goals and Objectives

Clean Energy



Accelerate the deployment of nuclear energy through public and private partnerships that solve critical nuclear material storage, processing and disposition challenges, utilizing the Site's expansive expertise to support regional energy sustainability

- *Accelerate deployment of small modular nuclear reactor technology*
- *Demonstrate clean energy systems*
- *Develop and lead the nation's used nuclear fuel cycle initiatives*



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Enterprise SRS: Goals and Objectives

National Security



Enhance national security

by applying unique SRS technology and systems assets to global nuclear nonproliferation, deterrence and threat reduction challenges

- *Lead proliferant materials disposition*
- *Lead global nuclear nonproliferation and threat reduction systems solutions through R&D, analysis, forensics and demonstrations*
- *Lead national deterrence programs, including R&D and management of tritium and helium-3 for the nation*



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How will we meet the goals?

Renew commitment.
New business direction.
Business objectives.
Not hollow talk.
Driven by Champions.



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What Will Success Look Like?



Recognized solutions provider.
Measurable progress.
Highly involved employees.
Sustainable and enduring future.



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What are the 12 E•SRS Initiatives?

Establish Center for Applied Nuclear Materials Processing and Engineering Research

Develop Solutions to Close and Better Secure the Nuclear Fuel Cycle

Accelerate Deployment of Small Modular Reactors (SMRs)

Deliver Disposition Paths for Nuclear Materials



“Our slogan — Nuclear Knowledge for the Nation — serves as the basis for creating an enduring, sustainable future for SRS capturing our greatest strengths.”

Dwayne Wilson
SRNS President and CEO



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What are the 12 E•SRS Initiatives?

Leverage and Revitalize Site Assets to Solve National and Regional Issues

Lead Research and Development of Transformational Waste Disposal Technologies

Increase Helium-3 Supply to Aid Nuclear Nonproliferation

Reduce Greenhouse Gas Emission via Clean Alternative Energy Projects



“At SRS, we are a full-service nuclear management site. We receive, accept, secure, analyze, package, process and disposition nuclear materials.”

Terry Michalske

SRNS Executive Vice President
and SRNL Director



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What are the 12 E•SRS Initiatives?

Develop and Deploy Next Generation Cleanup Technologies

Establish Advanced Center for Nuclear Forensics and Attribution

Post-TRIM Tritium Technologies

Expand Reach and Impact of National Center for Radioecology



"Our current SRS missions are important to the nation and the region, and they have prepared us for our future and sustained mission impact."

Dave Olson
SRR President
and Project Manager



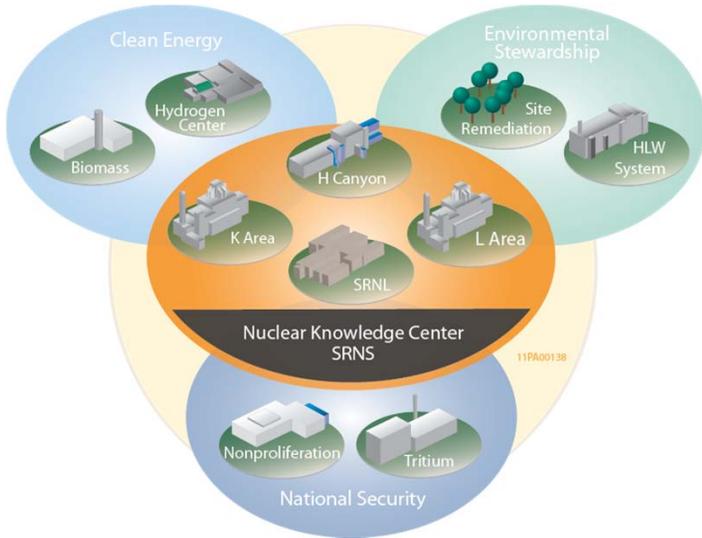
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Savannah River National Laboratory

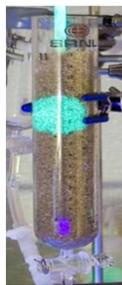


- Multi-program National Laboratory
- Safest Laboratory in DOE Complex
- Staff: ~1,000
- Budget: ~ \$260M (FY11)
- Three focused missions: Environmental Stewardship, Clean Energy, National Security
- Core nuclear capabilities: chemical processing/separation; materials, tritium/hydrogen; and environmental science

Environmental Stewardship



Solvent extraction technology for salt waste processing



Cleanup technology

Clean Energy



Porous wall hollow glass microspheres



Off-shore wind research

National Security



FBI forensics



Tracking /locating technology



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Mission Development Support Flow

Mission Development Council (MDC)

*D. Moody, D. Wilson, D. Dearolph, J. Allison, Z. Smith, D. Hintze T. Michalske,
B. Bilson, D. Olson, F. Dohse, D. Eyler*

Mission Development Process and Enterprise Tracking

R. Sprague, N. Delaplane, T. Fischer

POC, Enterprise•SRS Support Integration

S. Robinson, C. Nickell, S. Greene

Mission Development Support Team

R. Olsen, S. Greene, S. Bohanan

Enterprise•SRS 12 Strategic Initiatives and Champions

Center for NM Research <i>P. McGuire, J. Marra</i>	Nuclear Fuel Cycle <i>P. McGuire, T. Sanders</i>	Liquid Waste <i>T. Spears, J. Griffin</i>	SMR <i>S. Johnson, T. Sanders</i>	NM Disposition Paths <i>P. McGuire, R. Sprague</i>	Revitalize Site Assets <i>H. Belencan, R. Gentry</i>
Helium-3 Supply <i>C. McFall, T. Burris</i>	Alternative Energy <i>K. Guevara, T. Sanders</i>	Next Generation Cleanup <i>K. Guevara, J. Griffin</i>	Nuclear Forensics <i>K. Hooker, T. Burris</i>	Tritium Infrastructure <i>S. Cannon, D. Donati</i>	National Radioecology <i>K. Hooker, J. Marra, G. Rhodes</i>



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How Can I Get Involved?

Maintain safe work performance.

Be willing to change your approach to business.

Strive for innovation and creativity.

Remove barriers and boundaries.

Challenge the status quo.

Say “yes.”



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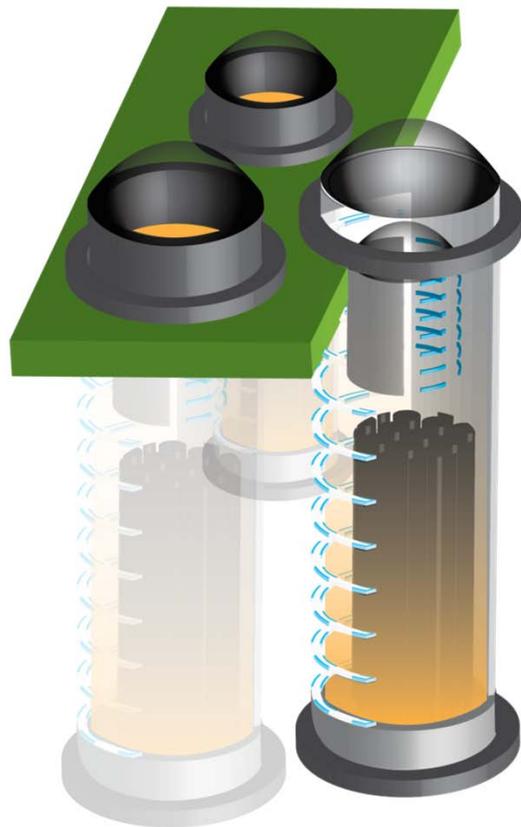
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Enterprise SRS: Clean Energy



Small Modular Reactor Research and Partnerships



- Small modular reactors (SMRs) are factory-fabricated and can be transported by truck or rail to nuclear power sites.
- SRS is ideal location for SMR research and development
- 3 signed Memorandums of Agreement with private companies and 5 more in discussions



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- Pursue top priority objectives
 - Support with specific and immediate initiatives
 - Allocated required resources to support these initiatives
- Re-shape cultural, organizational and business practices
 - Actively seek to expand the SRS national impact
 - Focus on achieving multiple customer objectives
- Build strong business and inter-agency support networks
 - Define and build relationships with policy makers, customers and suppliers
 - Extend beyond the SRS boundaries to obtain that goal

SRS leadership is committed to moving forward with the Enterprise SRS vision.



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