

# We put science to work.™

# Innovations

## from Savannah River National Laboratory

U.S. DEPARTMENT OF ENERGY • SAVANNAH RIVER SITE • AIKEN • SC

[srnl.doe.gov](http://srnl.doe.gov)

### SRNL Fast Facts

- > Located at the U.S. Department of Energy's Savannah River Site near Aiken, South Carolina
- > Operated by Savannah River Nuclear Solutions
- > "National Laboratory" for DOE Office of Environmental Management
- > Applied research, development and deployment of practical, high-value and cost-effective nuclear materials management and technology solutions in the areas of national security, clean energy and environmental stewardship
- > Supporting customers at SRS, DOE and other federal agencies nationally and internationally

### Contact Information

SRNL Office of Communications  
803.725.4396



## SRNL EM Innovation Program produces successful outcomes

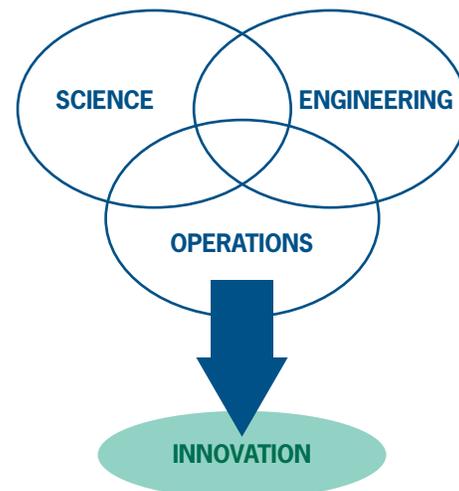
Many examples of innovation have occurred in the Environmental Management (EM) program when the national laboratories, site contractors and DOE collaborate with clear objectives and a well-defined, technologically achievable outcome. Examples of successful innovation in EM include:

- Development and Deployment of Caustic-Side Solvent Extraction and Development of Next Generation Solvent
- Groundwater/Vadose Zone Integration Project
- In-situ Decommissioning of Nuclear Facilities
- Creation of Active-to-Passive Environmental Remediation Methodologies.

While these are important examples, EM is committed to driving innovation into every part of its cleanup program.

### Innovation through Partnership

EM has tasked Savannah River National Laboratory (SRNL) and Pacific Northwest National Laboratory (PNNL) to jointly coordinate the engagement of the broader national laboratory community to bring the scientific and technological rigor needed to infuse innovation, evaluate/prioritize alternatives, define and execute technology development opportunities, and inform decisions that will reduce technical and programmatic risks. In this role, SRNL and PNNL will work closely with DOE-HQ, site offices, and contractors to identify, quantify and reduce



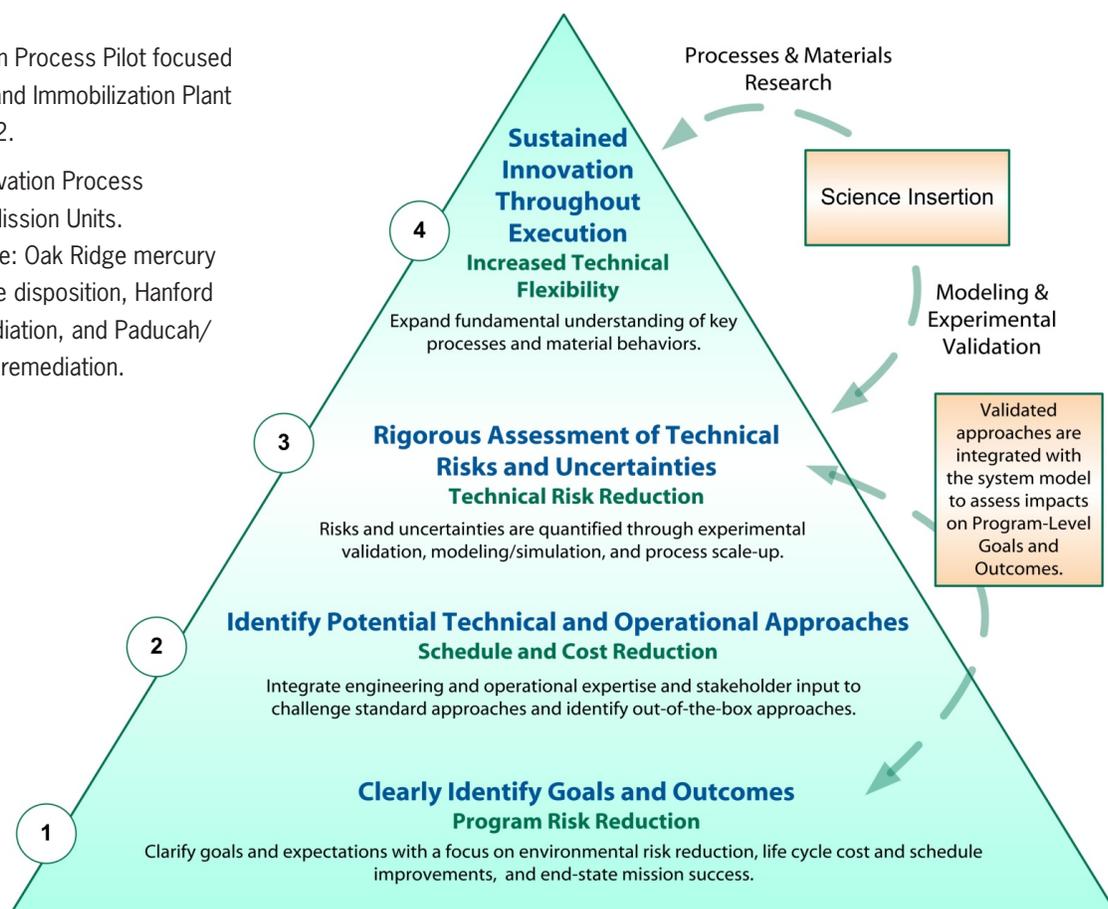
*Innovation is an outgrowth of the convergence of science, engineering, and practical applications. Investment is required in order to anticipate, mitigate and avoid technological obstacles to achieving the overall mission.*

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uncertainty in project baselines and enable a proactive approach with stakeholders. The national laboratories will leverage investment in science and draw upon the science community and world-class user facilities to drive innovation in EM approaches.

## Path Forward

- Execute the EM Innovation Process Pilot focused on the Waste Treatment and Immobilization Plant that was launched in FY12.
- Define additional EM Innovation Process initiatives across all EM Mission Units. Potential examples include: Oak Ridge mercury remediation, Idaho calcine disposition, Hanford Deep Vadose Zone remediation, and Paducah/Portsmouth groundwater remediation.



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