

# Office of Environmental Management (EM) Concluding Remarks for SRS Innovative Technology Integration Means Success

Dr. Monica C. Regalbuto

Associate Principal Deputy Assistant Secretary (EM-2.1)

March 18, 2015

Presented at Waste Management 2015 Symposium Phoenix, AZ

#### **EM Mission and Success Defined**

- Across the EM complex integrated innovative technology means success
  - EM mission is to reduce risk; achieve end states; retire the legacy
- Success is defined as:

safety \* performance \* cleanup \* closure

- Safety of human health and the environment is enhanced
- End state achieved in less time
- Technology is advanced and deployed
- Knowledge is gained, transferred, and shared

www.energy.gov/EM

#### **SRS Approach to Mission Success**

- SRS key areas of technology opportunities
  - Reducing risk
  - Integrating with new facilities
  - Production demands meet and accelerate
  - Address aging infrastructure and equipment
- Success requires:
  - Safety of human health and the environment is enhanced
  - Compliance with regulatory agreements
  - Technology improves operational efficiency

## **SRS Examples of Success**

Challenge	Innovation	Success
Maximize Current Facilities	Double Stack Canisters Repurpose Facilities (512S + 96H = Actinide Removal Process)	<ul><li>Cost Avoidance</li><li>Defer new construction</li><li>Deferred D &amp; D</li></ul>
Increase throughput	Next Generation Solvent	<ul> <li>Cost avoidance –Lifecycle</li> <li>Upstream blending benefits</li> <li>Reduces Waste Generation</li> <li>Improved Decontamination         Efficiency         </li> <li>Works Within Existing         Operation     </li> </ul>
Tank Closure	Heal Retrieval Grout Formulation	<ul><li>Optimize Closure Process</li><li>Waste Retrieval Enhancements</li><li>Chemical Cleaning Methods</li></ul>
Improve Operational Envelope	Alternate Reductant	<ul><li>Risk Reduction</li><li>Eliminate Hydrogen Production</li><li>Operational Flexibility</li></ul>
Increase Waste Loading	Batch Specific Frit	<ul> <li>Cost Avoidance</li> <li>Reduced Canisters Produced</li> <li>Shorten Project Lifecycle</li> <li>Increased Loading to 40%</li> </ul>

### **EM Technology Integration : Key to Success**

- Technology development and deployment key to site success
- SRS and other sites serve as test beds for innovative approaches
- EM complex mission requires building upon successes realized at various sites
- National EM missions align with global challenges in the nuclear industry