

FY2019 Performance Evaluation Summary

Contractor: Savannah River Nuclear Solutions, LLC (SRNS)

Contract: DE-AC09-08SR22470

Evaluation Period: October 1, 2018 – September 30, 2019

Basis of Evaluation: Fiscal Year (FY) 2019 Performance Evaluation and Measurement Plan (PEMP)

The FY 2019 PEMP for this contract is available at:

https://www.energy.gov/sites/prod/files/2020/01/f70/NNSA%20SRNS%20FY19%20PEMP%20Revision

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The Contract is available at: https://www.energy.gov/nnsa/savannah-river-site-contract

Award Fee Scorecard

SRNS's performance for FY19 on NNSA efforts is measured against two separate PEMPs, the NNSA PEMP and a separate Office of Environmental Management (EM) PEMP for the Savannah River National Laboratory (SRNL). For SRNS, NNSA PEMP Goals 3 and 4 are not applicable and therefore have no associated fee. The work measured against the EM PEMP for SRNL is discussed under SRNL Performance Goals 1.07 and 1.08.

NNSA PEMP Goals	<u>Rating</u>		A. D. 1 A. 1111	E. 1
	<u>Adjectival</u>	<u>Percent</u>	At Risk Available	<u>Final</u>
Goal-1: Manage the Nuclear Weapons Mission	Very Good	90%	\$5,644,988	\$5,080,489
Goal-2: Reduce Nuclear Security Threats	Excellent	95%	\$3,763,326	\$3,575,160
Goal-3: DOE & Strategic Partnership Projects Mission Objectives	N/A	N/A	\$ -0-	\$ -0-
Goal-4: Science, Technology & Engineering (ST&E)	N/A	N/A	\$ -0-	\$ -0-
Goal-5: Operations & Infrastructure	Good	75%	\$5,644,988	\$4,233,741
Goal-6: Leadership	Very Good	85%	\$3,763,325	\$3,198,826
Total Award Fee (NNSA PEMP)	Very Good	85.5%	\$18,816,627	\$16,088,216

SRNL PEMP Goals	Adjectival	Percent	<u>Available</u>	<u>Final</u>
Goal 1.07: NNSA Defense Programs	Excellent	95%	\$801,019	\$760,968
Goal 1.08 Nonproliferation	Excellent	95%	\$1,179,028	\$1,120,077
Total Award Fee (SRNL PEMP)	Excellent	95%	\$1,980,047	\$1,881,045

SRNL & NNSA PEMP Goals	<u>Available</u>	<u>Final</u>
Total Award Fee (SRNL & NNSA PEMP Goals)	\$20,796,674	\$17,969,261

NOTE: There is no fixed fee related to the SRNS contract.

Overall, SRNS earned a Very Good rating for FY2019, exceeding many of the objectives and key outcomes under the PEMP goals, meeting overall cost, schedule, and technical performance requirements with accomplishments that greatly outweigh issues.

Accomplishments:

Goal 1

- SRNS met all stockpile surveillance activities ensuring completion of stockpile assessment and Limited Life Component Exchange (LLCE) requirements.
- SRNS met requirements for all stockpile weapon systems' maintenance and Limited Life Component Exchange (LLCE) deliverables.
- SRNS completed tritium extractions, as scheduled.
- SRNS's team met all cost, schedule, and deliverable requirements related to the proposed Savannah River Plutonium Processing Facility (SRPPF) conceptual design development.
- SRNS provided outstanding support and development of information materials of the National Environmental Policy Act (NEPA) Public Scoping Meeting for the proposed pit production mission at SRS.

Goal 1.07 - SRNL

- SRNL continued supporting the Defense Programs mission objectives including assessing impact
 to operations for At-Risk Materials, Reservoir Surveillance Operations, and leading a team to
 develop and finalize a Savannah River Tritium Facilities hydride bed replacement strategy.
 Additionally, SRNL developed a revised reservoir unloading methodology and supervised
 successful completion of unloading in support of LANL.
- SRNL continued supporting science, technology and engineering activities to advance knowledge in tritium related technologies. SRNL sampling of titanium loaded test objects is on schedule. All Plant Directed Research and Development (PDRD) activities are meeting objectives.

Goal 2

- SRNS provided excellent support to Defense Nuclear Nonproliferation Research and Development (R&D) mission work for a project designed to develop a capability to collect and analyze tritium in-situ.
- SRNS demonstrated exceptional performance in completing extensive site activities significantly
 ahead of schedule expediting removal of court-ordered quantities of plutonium from the State of
 South Carolina.
- SRNS overcame multiple technical challenges throughout the year and successfully achieved a FY 2019 key outcome to complete the defined NNSA lay-up scope of the HB-Line facility.
- SRNS continued to provide support for the future disposition of the Japan Atomic Energy Agency Fast Critical Assembly fuel including supporting NEPA activities, conceptual design, and research and development activities for the selected disposition approach.
- SRNS supported the Radiological Assistance Program in providing Tactical Radiological/Nuclear Search Operations (TRNSO) training, responses to the contamination incidents, Triage training, and Radiation Hazard Level II training.

<u>Goal</u> 1.08 - SRNL

- SRNS successfully provided critical support as the Cross-Cutting Pillar lead on issues such as scrap recovery options, material shipment planning, and leading independent technical reviews of the Fuel Fabrication Pillar for the U.S. High Performance Research Reactor (USHPRR) Reactor Conversion program.
- SRNL provided important technical support for the development of domestic Mo-99 production capabilities making progress in conducting its valve reliability test program, pump component development, and safety basis testing.
- SRNL continued to provide excellent support for highly enriched uranium (HEU) removal efforts from the Yayoi Research Reactor and multiple U.S. origin nuclear removals.

<u>Goal 3 – Goal 4</u> - Not applicable to SRNS

Goal 5

- SRNS met cost and schedule performance for the Surplus Plutonium Disposition project during the year, achieved Critical Decision-1 (CD-1), achieved 90% design for CD-3A, and assisted in the development of a tailoring strategy to shorten the project schedule by 12-24 months.
- Completed three major glovebox construction activities without using open glovebox maintenance procedures, which resulted in a significant cost savings.
- SRTE facilities maintenance program exceeded expectations in Preventative Maintenance (PM)
 deferral rate, Corrective Maintenance (CM) backlogs and PM delinquency metrics while
 completing several significant outages.
- SRNS worked closely with the NNSA Transportation Safety Review Panel to address technical issues associated with the 9977 Type B package Safety Analysis Report. SRNS implemented a unique solution to a challenging technical problem to improve criticality safety.

Goal 6

- SRNS's leadership has worked diligently to meet the deadlines and provide support for MOX transition and planning for 50 pits per year mission at Savannah River. The SRNS team successfully accepted the MOX Complex Area within the 6-month allotted timeframe. SRNS's SRPPF leadership has provided excellent direction and guidance to the SRPPF Project Team making progress towards accomplishing milestones and deliverables required to support Conceptual Design completion.
- SRNS leadership demonstrated its commitment to operational excellence and contractor assurance. SRTE received the DP Award of Excellence for implementation of Tiered Operating Performance System (TOPS).
- SRTE continues to focus on maintenance program improvements and partner with SRFO to review maintenance execution and work planning and control performance.

Issues:

Goal 1

• Product Quality went through a period of significant declining performance with nonconformances resulting in reworks and rejects. SRNS did not achieve the cost of nonconformance (CONC) goal for the year. Through use of the Contractor Assurance System, issues were identified, mitigation plans were implemented, and deliveries were on-time.

Goal 2

• SRNS needs to continue emphasis on estimates, cost/schedule control to ensure that minor construction projects remain on track.

Goal 5

- Small Project execution has shown little improvement from last year's performance. Inadequate project planning led to significant project delays and increased costs realized in FY19; FY19 planning for future projects continues to be inadequate.
- SRNS Conduct of Operations performance for FY19 has been cyclic in nature, alternating between periods of strong performance to periods of weaknesses in disciplined operations.
- An Incident of Security Concern resulting from a Conduct of Operations issue led to significant corrective actions and expenditures of resources.

Goal 6

- SRNS has not demonstrated efficient, effective management of small projects. Effort was expended to create schedules; however, the schedules were not consistently met.
- SRNS leadership did not provide NNSA prompt notification of an Incident of Security Concern.