FY2020 Performance Evaluation Summary

**Contractor:** Savannah River Nuclear Solutions, LLC (SRNS)

**Contract:** DE-AC09-08SR22470

**Evaluation Period:** October 1, 2019 – September 30, 2020

**Basis of Evaluation:** Fiscal Year (FY) 2020 Performance Evaluation and Measurement Plan (PEMP)

The FY 2020 PEMP for this contract is available at:

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

**Award Fee Scorecard**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Rating</th>
<th>Adjectival</th>
<th>Percent</th>
<th>At Risk Available</th>
<th>Final Available</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal-1: Mission Execution: Nuclear Weapons</td>
<td>Excellent</td>
<td>91%</td>
<td>$9,986,254</td>
<td>$9,087,491</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal-2: Mission Execution: Global Nuclear Security</td>
<td>Excellent</td>
<td>95%</td>
<td>$6,657,503</td>
<td>$6,324,628</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal-3: DOE &amp; Strategic Partnership Projects Mission Objectives</td>
<td>N/A</td>
<td>0%</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal-4: Mission Execution: Science, Technology &amp; Engineering (ST&amp;E)</td>
<td>N/A</td>
<td>0%</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>Goal-5: Mission Enablement</td>
<td>Very Good</td>
<td>80%</td>
<td>$9,986,254</td>
<td>$7,989,003</td>
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<td>Goal-6: Mission Leadership</td>
<td>Excellent</td>
<td>91%</td>
<td>$6,657,503</td>
<td>$6,058,328</td>
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<td></td>
</tr>
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</table>

**Total Award Fee**

<table>
<thead>
<tr>
<th>Adjectival</th>
<th>Percent</th>
<th>Available</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>88.5%</td>
<td>$33,287,514</td>
<td>$29,459,450</td>
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**SRNL PEMP Goals**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Rating</th>
<th>Adjectival</th>
<th>Percent</th>
<th>Available</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1.07b: NNSA Defense Programs</td>
<td>Excellent</td>
<td>95%</td>
<td>$831,111</td>
<td>$789,556</td>
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</tr>
<tr>
<td>Goal 1.08b Defense Nuclear Nonproliferation</td>
<td>Excellent</td>
<td>95%</td>
<td>$1,239,172</td>
<td>$1,177,213</td>
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</tr>
</tbody>
</table>

**Total Award Fee (SRNL PEMP)**

<table>
<thead>
<tr>
<th>Adjectival</th>
<th>Percent</th>
<th>Available</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>95%</td>
<td>$2,070,283</td>
<td>$1,966,769</td>
</tr>
</tbody>
</table>

**SRNL & NNSA PEMP Goals**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Rating</th>
<th>Available</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Award Fee (SRNL &amp; NNSA PEMP Goals)</td>
<td>$35,357,797</td>
<td>$31,426,219</td>
<td></td>
</tr>
</tbody>
</table>

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

SRNS’s performance for FY20 on NNSA efforts is measured against two separate PEPMs, 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 1.07b and 1.08b.

SRNS earned an overall rating of Very Good for this performance period. SRNS earned Excellent ratings for Goals 1, 2, 6, SRNL Goal 1.07b, and SRNL Goal 1.08b and a Very Good rating for Goal 5. SRNS exceeded 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 expectations for each of the stockpile weapons systems’ maintenance and LLCE deliverables.
- SRNS met all production and delivery requirements for Gas Transfer System (GTS) units including meeting an immediate Department of Defense need within one week of notification.
- SRNS is on track to provide Critical Decision (CD)-1 Savannah River Plutonium Processing Facility (SRPPF) deliverables on schedule. SRNS proactively developed SRPPF scope and design options for NNSA consideration.

Goal 1.07b - SRNL
- SRNL continues to support Defense Program mission objectives including successfully completing hydroburst testing on a development reservoir, completing the first assembly and function test of a development GTS prototype unit, and developing a manifold for testing of the zeolite used in Recovery Gas Dryers for end of life disposal measures.
- SRNL continues to support science, technology and engineering activities to advance knowledge in tritium related technologies such as characterization of advanced manufacturing (AM) materials. SRNL effectively supported FY20 Plant Directed Research and Development tasks.

Goal 2
- SRNS made significant progress in advancing dilute and dispose technologies such as developing technical criteria for the procurement of equipment and supplies used in the dilution process and establishing a supply chain to meet program needs.
- SRNS K-Area facility management continued to provide outstanding coordination for program activities, managing multiple field activities through site suspension and recovery planning due to the pandemic (completed downblend process optimization minor construction project, restarted downblend activities in the K-Area interim surveillance glovebox, and regained lost schedule).
- SRNS continues progress in hiring, training, and security clearances to support an increase to four shift downblend operations in the K-Area Interim Surveillance (KIS) glovebox.
- SRNS advanced K-Area automation by providing a Technical Maturation Plan for development/application of robotics for autonomous criticality control overpack movement/receipt inspections and developing a K-Area Six-Year Automation Plan.
- SRNS supported the SPD Project team in the development and approval process for the SPD Tailoring Strategy, CD-1, and CD-3A Phase 1; completed 6 months of field work for site preparation, demolition and removal, and security modifications; completed design, cost estimate, and schedule for CD-3A Phase 2; and 60% of design for the SPD Project.

Goal 1.08b - SRNL
- Through innovative application of technology, SRNL successfully applied NA-22 funded particulate work towards pandemic tasks. SRNL provided strong technical support on numerous cross-cutting activities for the U.S. High Performance Research Reactors (USHPRR) as well as supporting the development of the new PRO-X project. SRNL oversaw the successful completion of the multi-year campaign to repatriate target residue material from Canada. SRNL successfully developed and demonstrated autonomous robotic systems to move, open, inspect, and close shipping packages associated with the SPD Program.
- SRNL supported the International Nonproliferation Export Program (INECP) in development of the Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Commodity Identification Training (CIT) train-the-trainer and national enterprise outreach remote workshops, updating the CBRNE CIT course, and supporting an Analysis of Strategic Commodity Transfers workshop.
- SRNL experts provided valuable contributions to projects within the Office of Nuclear Verification (NA-243) Warhead Verification Program and exercised high quality leadership as an NA-243 Plutonium Verification Team (PVT) Co-lead.

Goal 3 – Goal 4 – Not applicable to SRNS
Goal 5
• SRNS has coordinated the COVID-19 response with Environmental Management and HQs leading to a smooth continuation of tritium operations. SRTE remained fully operational and met all DoD mission deliverables during the ongoing COVID-19 pandemic.
• SRNS’s Conduct of Operations (ConOps) performance has improved substantially this year with no Technical Safety Requirement (TSR) violations since January 2019.
• Despite COVID-19 restrictions, SRNS completed scheduled maintenance activities including required preventative and priority corrective maintenance, thereby reducing risk to mission from unplanned evolutions. SRTE provided excellent support in safety basis activities including reissuing the Tritium Facility combined Documented Safety Analysis (DSA) and TSRs (NNSA approved December 2019), annual updates, and co-located worker risk reduction scope.
• SRNS met expectations on the Tritium Finishing Facility (TFF), Surplus Plutonium Disposition (SPD), and Mixed Oxide Termination & Transition (MOX T&T) projects.
• The MOX T&T effort is on schedule and $16M under budget. The MOX property screening process is supporting effective reuse of MOX property by other DOE organizations and government agencies.

Goal 6
• SRNS demonstrated excellent leadership during the COVID-19 pandemic. SRNS rapidly developed and implemented initiatives to protect the workforce, while collaborating with customers to ensure mission critical and time-sensitive work continued.
• SRTE has improved its communication and was more responsive and focused overall, especially in conduct of operations and the management of Tritium small projects
• SRNS Project Management Organization leadership continued to proactively pursue contractual and organization re-alignment in support of NNSA capital projects. SRNS leadership needs to continue to focus efforts on expediting the transformation to an Engineering, Procurement and Construction (EPC) centric organization to support the NNSA capital projects.
• NNSA projects have had no schedule impacts to the critical path due to COVID-19. The MOX-T&T leadership team made significant improvements in the area of project management including a project schedule with a credible critical path and project metrics.

Issues:
Goal 1
• There continue to be inefficiencies within SRNS’s team supporting SRPPF due to the lack of experienced project personnel and project centric systems, processes, and procedures.

Goal 2
• The K-Area characterization and storage pad Minor Construction Project progressed but project completion is delayed due to subcontractor safety, quality, and schedule issues. SRNS successfully mitigated subcontractor performance issues.

Goal 3 – Goal 4 – Not applicable to SRNS

Goal 5
• SRNS continues to struggle with executing recapitalization projects planned in prior years within cost estimates and schedule. One such project increased by $8M, nearly doubling the original Total Project Cost. A project improvement initiative is underway.

Goal 6
• SRNS Leadership fell short in preparing and executing Safety Significant and Safety Class construction on the SPD Project. Construction delays were compounded by a lack of transparency.