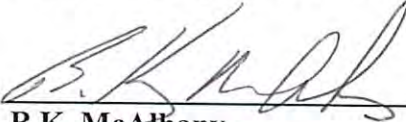
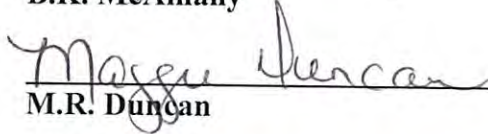



Savannah River Site Office
Year-End Performance Evaluation Report of
Savannah River Nuclear Solutions, LLC
Contract No. DE-AC09-08SR22470
for Performance Period

March 1, 2009 – September 30, 2009

Prepared by: 
B.K. McAthany


M.R. Duncan

Reviewed by: 
T.P. Fischer, AMCABM

Approved by: 
D.J. Dearolph, Manager

Executive Summary

Work within the Tritium Facilities at the Savannah River Site is performed by Savannah River Nuclear Solutions (SRNS) under Management and Operating Contract #DE-AC09-08SR22470. This is an Office of Environmental Management contract under which NNSA-funded and directed work is also performed. For FY09, SRNS was under a fixed fee period through February 28, 2009. The contractor's performance evaluation and compensation methodology then went to an Award Fee format for the remainder of the fiscal year. This report covers the March 1 – September 30, 2009 incentive based performance period.

The SRNS contract listed six basic outputs for management and operation of the Tritium Facilities. The NNSA's Savannah River Site Office (SRSO) worked with SRNS to determine what objectives were required to successfully meet these outputs and agreed upon what metrics were needed to adequately assess acceptable performance.

The SRSO feedback process utilizes the PbViews software package to track and document contractor performance on a monthly basis. Monthly feedback meetings with the contractor were held throughout the performance period and the contractor was apprised of performance, favorable and unfavorable, in each area. Where performance was rated as unsatisfactory, the contractor was informed of the deficiencies and their impacts to the program. These reports were then formally transmitted to the contractor for action as appropriate. The monthly feedback reports are provided as an Appendix.

An overall summary of each of the six outputs is given below. The detailed discussions are provided within each of the monthly reports.

Contract Output 1. Support the nuclear weapons stockpile by safely providing tritium and non-tritium loaded reservoirs to the Department of Defense in accordance with NNSA guidance and direction.

This work is the highest priority Stockpile Stewardship mission at Savannah River. This Contract Output provides the contractor incentive to meet all Production Directive and shipping commitments on schedule. The work covered by this Contract Output is to accomplish the DSW mission to provide loaded reservoirs in support of the nuclear weapons stockpile, and to meet all monthly directive commitments for delivery of Limited Life Components (LLC) to the Department of Defense and Pantex Plant.

Facilitate a reduction in the number of classified parts to reduce inventory of legacy classified materials. The decrease of classified parts is accomplished by unloading non-reclaimable reservoirs and Hydride Storage Vessels (HSVs), as well as firing actuators.

SRSO Assessment

Overall performance for this output was rated as outstanding. All requirements for loading, packaging and shipment of reservoirs per SRSO directives and schedules were met. SRNS continued their excellent record of on-time delivery of LLC components. SRNS demonstrated an effective quality program that met NNSA requirements and expectations. The Cost of Nonconformance was well below the goal of less than 2% during the entire period. Interaction with and support provided to the Office of Secure Transportation (OST) was also instrumental in order to meet delivery schedules. SRNS also successfully completed the packaging and disposal of legacy materials such as non-reclaimable reservoirs and actuators.

Another item covered by this contract output is the recovery and processing of Helium-3 for sale through the DOE Isotope Program. All commitments for making material available for sale were met with no impacts to normal facility operations.

Contract Output 2. Extract tritium from irradiated Tritium-Producing Burnable Absorber Rods.

The Campaign programs are executed in accordance with Work Authorizations, Work Authorization Directives, Prioritized Project Lists, the Integrated Priority List process, program implementation plans, and all other program requirements. This Contract Output provides the contractor incentive to complete selected tritium production-related milestones that are significant to the support of the Tritium Readiness Program and operation of the Tritium Extraction Facility (TEF) to extract TPBARs.

Completion of the activities cited in this Contract Output will replenish the Nuclear Weapons Complex inventory of tritium. Meeting these work requirements is dependent upon the proper functioning and availability of a one-of-a-kind facility, many complex pieces of equipment, and the availability of a knowledgeable staff to operate and maintain it.

SRSO Assessment

Overall performance for this output was rated as good. Performance during Responsive Operations steadily improved as the facility gained more operating experience which resulted in overall increased efficiencies and reduced work time. Efforts to repair and rebuild cutter heads in lieu of purchasing new ones resulted in significant cost savings to the program and reduced the overall TPBAR breaching time. The Cycle 8 extraction was actually completed one month ahead of schedule due to SRNS implementing lessons learned during prior extraction operations. However, these successes were overshadowed by continual issues with the welding of the TEF waste cask. The initial failure of the weld resulted in prolonged suspension of work and multiple rework attempts to repair the weld. The efforts were plagued with issues related to conduct of operations, industrial

hygiene, and management. The evolution to load, weld and transfer the waste cask to the burial vault began in January 2009 and continued into FY10.

Contract Output 3. Support the Stockpile Stewardship Program through reservoir surveillance operations.

The DSW program supports the Stockpile Stewardship Program through reservoir surveillance operations, and is executed in accordance with Work Authorizations, Work Authorization Directives, Prioritized Project Lists, PCD Requirements, Baseline Dismantlement Schedule and all other program requirements.

The Gas Transfer System (GTS) testing program is a key activity in the Nuclear Weapons Stockpile Surveillance Program. The NNSA and Design Agencies have placed a high priority on timely GTS testing and reporting. The on-time delivery of GTS test data will provide key information on the performance and aging effects of GTS components, and support decisions for future weapon design.

This Contract Output provides the contractor incentive to achieve National Nuclear Security Administration (NNSA) Reservoir Surveillance Operations work scope that is required for continuing Stockpile certification, Life Extension Program (LEP) First Production Unit (FPU) and related functions.

The work scope consists of function testing, burst testing, and metallographic examination of Stockpile Laboratory Tests and similar testing of units from the Life Storage Program. The work scope also includes testing of production samples. Other activities in support of the surveillance program include loading, unloading, reclamation and storage of LSP reservoirs. Work scope is considered complete when GTS performance data is documented in RAPTOR reports and destructive examination results are documented in RAISIN reports for SLT units and Metallurgical reports for LSP units. Specific work scope is documented and tracked to completion in the RSO schedule.

SRSO Assessment

Overall performance for this output was rated as outstanding. SRNS satisfactorily completed all requirements and commitments related to the reservoir surveillance program. SRNS exceeded the goal of 95 function test equivalents and all test data was satisfactorily documented in RAPTOR and RAISIN reports as required.

Contract Output 4. Conduct research and development activities that solve complex problems related to the mission of SRSO and the NNSA.

Research and development activities are conducted to solve complex problems related to the mission of SRSO and the NNSA.

A focused research and development program advances the design and manufacture of Gas Transfer System components and manufacturing methods. These activities are sponsored by the Readiness Campaign, Enhanced Surveillance Campaign, as well as the core mission programs (RTBF and DSW). This Contract Output provides the contractor incentive to complete research and development activities that support NNSA missions at Savannah River and other NNSA sites.

SRSO Assessment

Overall performance for this output was rated as outstanding. SRNS satisfactorily developed methods and issued sound technical reports for ultrasonic inspections of the W78 and W87 reservoirs ahead of schedule and under budget.

SRNS also planned, executed, and managed to establish scope, cost, and schedule for all Campaign activities. Level 2 milestones were completed on schedule and within budget. Monthly performance and cost data were supplied to the NNSA Campaigns Manager on a monthly basis.

Contract Output 5. Maintain the Tritium Facilities in a safe, secure and responsive operating condition.

This Contract Output emphasizes Programs that provide the physical infrastructure and operational capabilities required to conduct Directed Stockpile and Campaign activities.

SRSO Assessment

Overall performance for this output was rated as good. The five focus areas within this output were Operations/Safety, Safeguards & Security, Business, Cyber Security, and Tritium Facility Transformation. We will discuss each of these areas below in more detail.

Operations/Safety

Within the Operations/Safety area, SRNS had many positive accomplishments. The contractor's training organization ensured all personnel were trained and qualified to properly execute their job. Evidence of this effort included the use of initiatives such as simulator training to evaluate response to various scenarios. Overall safety statistics were well within established goals. This was indicative of a proactive approach to safety and was demonstrated through the use of the Automated Hazards Analysis process and the Behavior Based Safety observations. There were no environmental or waste management

issues during the period and all releases were well within prescribed permit allowances. SRSO, with the assistance of the NNSA Service Center, formally assessed the areas of maintenance, OSHA, and fire protection. These assessments were completed and resulted in no findings against the contractor. The HS-64 group performed an assessment of nuclear safety at the Tritium Facilities and had no findings. Other significant accomplishments included supporting the NNSA's Quality Assurance Improvement Project, Requirements Modernization and Integration Project, National Voluntary Laboratory Accreditation Program certification, and development/implementation of new procurement performance metrics.

On the negative side, there were numerous issues in the work planning and execution arena. Early in the rating period, there were several instances noted by SRSO which were indicative of complacency and failure to follow procedures on the part of the SRNS staff. These deficiencies culminated in a series of Conduct of Operations and Work Planning events during the month of May. SRNS aggressively worked to reverse this trend in performance through the use of coaching teams, pause periods, and simulator training. A contamination event in June was eventually tied back to poor radiological practices being utilized by the Radiological Control Technicians. Late in the rating period, it was learned that several items had been shipped to the customer with the incorrect fill date on them. This occurred despite multiple peer reviews, supervisor reviews, and QA acceptance.

Safeguards & Security

Within the Safeguards & Security area, SRNS met all requirements. Physical security operated effectively and efficiently during the period, and equipment availability for the Tritium Facilities exceeded the overall site averages. During the rating period, SRNS was assessed by HS-61 and there were no findings against the Tritium Facilities. The Information Protection Program met all requirements and the number of ACREM items was substantially reduced. The contractor also developed a risk-informed approach to S&S for the Tritium Facilities that will save over \$4M/year and will be implemented in FY10.

Business

The contractor maintained an effective Contractor Assurance System (CAS) during the period. Within the Tritium Facilities, the contractor has established a comprehensive, structured issues management program. Issues management performance met expectations throughout the period and provided for timely and effective resolution of deficiencies. Budget management and utilization met NNSA expectations and SRNS was responsive in providing input for various budget scenario requests from NNSA HQ during the rating period.

Cyber Security

In the first two months of the performance period, SRNS experienced issues with the quality and timeliness of documents submitted to SRSO for review and approval. SRNS was responsive to performance feedback and there was a noted improvement in that subsequent documents were submitted in a timely manner and were of high quality. As

required, two NAP-compliant Certification and Accreditation packages were received from SRNS.

Tritium Facility Transformation

The Tritium Facility Transformation Implementation Plan developed in FY08 was replaced with the significantly more comprehensive Tritium Programs Transformation Business Plan. Using information from the business plan, a Human Capital Management Plan was also produced which established a process to identify skills and staffing requirements required to support the Defense Programs mission in the future. An in-depth evaluation of footprint utilization, along with identification of process technology improvements, was performed which resulted in a plan which can achieve significant gains in efficiency.

Contract Output 6. Participate in the NNSA Multi-Site Incentives

Participate in the NNSA Multi-Site Incentives by working with Complex partners to achieve Complex-wide goals. Although SRS Tritium Programs' level of participation will vary across the individual Multi-Site Incentives, the even distribution of available fee encourages partnership with other NWC sites to achieve NNSA's objectives. This is the purpose of Multi-Site Incentives.

SRSO/HQ Assessment

Evaluation of the Multi-Site Incentives at the SRSO level resulted in a performance rating of outstanding. Proactivity in the importation of the NNSA Supply Chain Management processes for potential implementation at the site level is particularly noteworthy.

NNSA-HQ analysis of overall Enterprise performance on the Multi-Site Incentives was provided via memorandum dated October 28, 2009, Harencak to Distribution, "Final Status Report for Fiscal Year 2009 Multi-Site Performance Targets". All multi-sites incentives in which SRS was identified as being a contributor were successfully completed. Although not formally listed as a contributor for incentive number 3.5, the Headquarters analysis cites SRS support as contributing to this element's completion, which was the only element in the FY09 list identified as exceeding expectation.

Overall Summary

SRNS successfully completed all of its objective items which resulted in earning 100% of available fee. SRNS also worked with others in the NNSA complex on the Multi-Site Incentives which resulted in earning all available fee (10% of total fee). These efforts are considered to warrant a rating of Outstanding. Within the subjective areas, SRNS managed and operated the Tritium Facilities and continued to meet mission requirements. This resulted in SRSN earning 88% of available fee and this effort is considered to be Good. Overall, SRNS ended the rating period earning 94% of available fee (subjective + objective + multi-site).