

Savannah River Site Office

Year-End Performance Evaluation Report of

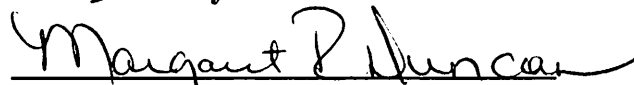
Savannah River Nuclear Solutions, LLC

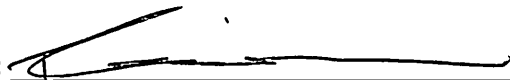
Contract No. DE-AC09-08SR22470


for Performance Period

October 1, 2009 – September 30, 2010

Prepared by: 
B.K. McAlhany


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 FY10, SRNS was under an Award Fee format with all fee “at-risk”. This report covers the October 1, 2009 – September 30, 2010 incentive based performance period.

The SRNS Performance Evaluation Plan contains eight basic contract outputs for the management and operation of the Tritium Facilities. The NNSA’s Savannah River Site Office (SRSO) worked with SRNS to develop which objectives were required to successfully meet these outputs and agreed on which metrics were appropriate to adequately assess acceptable performance.

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

The SRNS performance received a recommended aggregate rating of Excellent with an aggregate score of 92. An overall summary assessment of each of the eight outputs is provided below. Detailed discussions are provided within each of the monthly reports. Note that outputs 1-4 are *objective*, output 5 is a *hybrid* (objective and subjective) and outputs 6-8 are *subjective*.

SRSO Assessment of Contract Output 1 (Objective):

Overall performance for this output was rated as Excellent.

The eight focus areas within this output were Loading & Shipping, Reservoir Quality, Helium-3 Program, Packaging & Shipping, Classified Parts Reduction, Function Testing & Reporting, Reporting Time Duration, and Post-Function Testing.

SRNS met all requirements for loading, packaging, and shipment of reservoirs per SRSO directives and schedules for the year, continuing the outstanding record of on-time delivery of LLC requirements while successfully managing multiple changes to the FY10 Master Nuclear Schedule Program Control Document requirements. The Cost of Conformance was below the goal of less than 2% for eleven of twelve months during the period. Failure to meet this goal for the one month resulted in a fee reduction.

Processing of Helium-3 gas continued as needed with no adverse impacts on the mission. SRNS successfully completed the packaging and disposal of legacy reservoirs.

SRNS satisfactorily completed all requirements and commitments related to the reservoir surveillance program. SRNS exceeded the goal of 150 function test equivalents and all test data was satisfactorily documented in RAPTOR and RAISIN reports, as required. Destructive examinations were performed on Life Storage Program units and the results were documented.

SRSO Assessment of Contract Output 2 (Objective):

Overall performance for this output was rated as Excellent.

Performance during Responsive Operations improved over the course of the fiscal year as the facility gained more operating experience which resulted in increased efficiencies and reduced work time. Cycle 9A and 9B TPBARs were received ahead of schedule and extraction of Cycle 9A TPBARs was completed ahead of schedule. This allowed the facility to return to the Responsive Operations mode sooner than planned which in turn freed up resources for other work activities within the Tritium Facilities. The TEF waste cask was shipped to the SRS burial ground. This was a significant accomplishment as it was the first waste cask to be loaded and shipped from the facility.

SRSO Assessment of Contract Output 3 (Objective):

Overall performance for this output was rated as Excellent.

SRNS completed design for the Gen1 hydride bed with thermal enhancement cartridge. SRNS also demonstrated an automatic control system for the mini-TCAP system. The Gen 1 Hydride beds and the TCAP system are important to the successful operation of the HANM facility as the hydride beds are utilized for gas storage and the TCAP system provides isotopic separation. The existing processes have been in operation for over 15 years and these improvements should enhance future operations and performance within the Tritium Facilities. The mini-TCAP will also reduce the system footprint within the TCAP glovebox which will allow greater flexibility for future facility modifications.

SRSO Assessment of Contract Output 4 (Objective):

Overall performance for this output was rated as Excellent.

All projects listed in this output were completed on or ahead of schedule. Projects completed included items such as Design of the Helium-3 Separation and Bottling Process, Design and construction of the Tritium Office/Shop Building, and completion of the ARMS Modernization project. Several of the projects supported the TRIM initiative by allowing consolidation of activities and moving into more efficient facilities. As a result of a decision to change the pension funding level for FY10, additional funding was

available to allow SRNS to pull out-year projects into FY10 for completion. This will help address concerns with the projected funding shortfalls in FY12.

SRSO/HQ Assessment of Contract Output 5 (Hybrid):

Overall performance for this output was rated as Excellent for the *objective* tasks and Very Good for the *subjective* tasks.

NNSA-HQ analysis of overall Enterprise performance on the Multi-Site Incentives was provided via memorandum dated October 28, 2010, Cook to Distribution, "Final Status Report for Fiscal Year (FY) 2010 Multi-Site Performance Targets". All multi-site incentives in which SRS was identified as being a contributor were successfully completed.

SRNS began execution of its Severability Implementation Plan which was developed as a deliverable in FY09. In furtherance of this plan, SRNS moved to position the Tritium Mission such that it could be more easily severed from the Environmental Management contract under potential future contract scenarios.

From the modernization standpoint, SRNS issued a comprehensive Tritium Programs Transformation Business Plan. The overall purpose of this plan was to begin assessing future needs of the Tritium Facilities with regards to staffing and skill mixes. In-depth evaluations of footprint utilization, along with technology improvements, were performed which resulted in a plan which will pay dividends in the form of performance efficiencies, if implemented.

SRNS evaluated the KCP Governance Model, along with benchmarks of SNL and NNSS. This resulted in the development of a Tritium Programs Governance Model for SRS. The model included all five of the aspects of governance implementation. Integrated implementation teams were established for all five areas and execution of a multi-year plan has begun. Our joint work in FY10 made it readily apparent we will need to evaluate various aspects of governance as we work through implementation to ensure it makes economic sense to implement certain changes due to our unique contract situation.

SRSO Assessment of Contract Output 6 (Subjective):

Overall performance for this output was rated as Very Good.

Within the Operations area, SRNS had many positive accomplishments including a successful extraction run at TEF, modification to the P1 Stripper System in HANM, upgrades to the air monitoring system in HAOM, and very good performance in a Facility Evaluation Board review. Facility availability was outstanding with outages being well planned and executed, causing minimal impact on the facilities. Improvement was demonstrated in several of the Maintenance program performance metrics. Good progress was made in establishing a pipeline of operators to replace retiring staff. Quality was effectively managed with the initiation of a continuous improvement

program. This CI program produced several improvement projects. The Engineering organization supported a number of efforts to improve facility operations and cost effectiveness. The Rounds Reduction effort was a resounding success. Nuclear Safety, Fire Protection, and Radiation Safety programs effectively enabled facility operations.

Throughout the year NNSA noted instances of complacency, inattention to detail, and lack of rigor by the Operations, Engineering, and Maintenance organizations when executing procedures and implementing technical safety requirements. This was evidenced by several events during the year, culminating in a technical safety requirement violation in March. Contractor management worked aggressively to combat these problems with continued implementation of HPI principles, improvements to the turnover process and increased use of operational pauses and drills. Management focus to improve this facet of operations continued into the new fiscal year.

While most elements within this output were rated as Very Good or Excellent, Operations and Work Planning, which SRSO considers the most important element, was only rated Good based on the issues noted above. Further improvement in this area is warranted.

SRSO Assessment of Contract Output 7 (Subjective):

Overall performance of this output was rated as Very Good.

Within the Health and Safety area, SRNS had many positive accomplishments. Implementation of the Integrated Safety Management System (ISMS) continued to be a program strength as evidenced by strong and effective execution in managing all Health and Safety program elements in accordance with applicable regulations, DOE Orders, and Site requirements. Employee involvement remained strong as evidenced by Behavior Based Safety (BBS) observations. The routine safety and housekeeping audits, walk-downs of chemical storage areas, and hazard assessment surveys all contributed to a strong health and safety program. There were no environmental or waste management issues noted during the year.

SRNS proactively implemented a risk-informed approach for S&S at the Tritium facilities, scaling-back Protective Force members and pursuing a modernization effort at the Entry Control Facility. SRNS ensured everything was integrated and coordinated prior to reducing the Protective Force staffing and the transition was seamless. SRNS also completed conversion of tritium, deuterium and lithium accountability to a production inventory methodology, thereby removing MC&A requirements. The result was a 40% reduction in the annual facility security costs.

Within Cyber Security, SRNS completed the work needed to accredit systems pursuant to the NNSA NAPS guidelines and submitted several supporting documents. The quality of the work and completeness of the documentation was Very Good. This constitutes an improvement in performance from FY-09. SRNS did an excellent job on completing all 35 data calls and supporting various NNSA headquarters initiatives.

SRSO Assessment of Contract Output 8 (Subjective):

Overall performance of this output was rated as Very Good.

SRNS maintained an effective Contractor Assurance System (CAS) during the rating period. Within the Tritium Facilities, SRNS established a comprehensive, structured issues management program and Issues Management performance met expectations by providing for timely and effective resolution of deficiencies.

The funding and scope for project work increased significantly due to a decision to fund the pension program at the ERISA-minimum level (well below the budgeted level). As a result, items from out-year plans were pulled into FY10 for completion. The majority of these additional projects have been completed and the use of the “pension windfall” has been wisely used to better position the NNSA program for the expected pension funding problems in FY12. A Very Good Program/Project Management system enabled SRNS to make these moves and accomplish the work.

Fiscal management and budget execution generally met NNSA expectations and SRNS was responsive to the various budget scenario requests from NNSA HQ during the rating period. SRNS Tritium struggled throughout the year with accurate forecasting and financial reporting. This difficulty stemmed from an outdated accounting system and loss of knowledge for a major system component at the site-wide (EM) level. The SRNS Tritium staff was, on numerous occasions, required to manually reconstruct data to meet financial reporting and requirement needs for both the Site Office and HQ.

Corporately, SRNS has made significant gains in implementing a new accounting system across the site. At the request of SRSO, SRNS Tritium Programs accelerated the design and implementation of a new reporting tool. The Oracle Hyperion Planning ERP system will replace and enhance the lost “STARS” system capabilities. This application was completed in the last week of the FY and should greatly enhance cost transparency for Tritium Programs as well as across the entire SRNS contract. It should also improve SRNS’ capability to make cost and risk decisions for Program/Project Management and provides transparency of costs supporting future severability decisions.

Overall Summary

SRNS successfully completed all but one of its objective requirements which resulted in SRNS earning 99.1% of available fee. SRNS also worked with others in the NNSA complex on the Multi-Site Incentives which resulted in earning 100% of available fee. Within the subjective areas, SRNS managed and operated the Tritium Facilities and continued to meet mission requirements. This resulted in SRSN earning 85% of available fee and this effort is considered to be Very Good. Overall, SRNS ended the rating period earning 92% of available fee (subjective + objective + multi-site).