RL-676 (03/99)

United States Government **Department of Energy**

Office of River Protection

memorandum

NOV 1 5 2005

DATE:

REPLY TO ATTN OF: TED:DCB 05-TED-076

SUBJECT: INDEPENDENT REVIEW OF THE SAVANNAH RIVER SITE (SRS) SAFETY SYSTEMS OVERSIGHT (SSO) IMPLEMENTATION

TO: Michael A. Mikolanis
Federal Technical Capabilities Program Agent Alternate
Savannah River Site

This memorandum transmits the attached SSO Implementation Assessment of SRS performed last week at your request. SRS factual accuracy comments have been incorporated. This assessment meets the Fiscal Year 2005 Federal Technical Capabilities Program Annual Plan Action 3.2 for each site to perform independent SSO program implementation final assessments.

Please let me know if I can be of service to SRS in the future. If you have any questions please contact me on (509) 372-0947.

Sincerely,

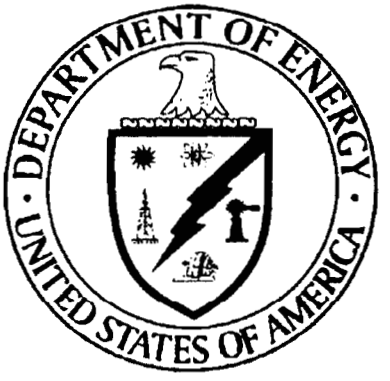
DC Bryson

Dana Bryson
Director, Tank Farms Engineering Division,
Office of River Protection

Attachment

Independent Review of the Savannah River Site (SRS) Safety Systems Oversight (SSO) Implementation

FINAL REPORT



November 2005

DC Bryson

Dana C. Bryson
Independent FTCP Agent

Approved:

Michael Mikolanis
SRS Alternate FTCP Agent

Executive Summary

This SSO Implementation Assessment was performed at the request of the SRS Alternate Federal Technical Capabilities Program (FTCP) Agent. The assessment field work was performed November 1 through 4, 2005. The results of this review are intended to provide the SRS with a measure of the progress that has been made in the implementation of their SSO Program.

The on-site assessment was performed over the course of four days. During the assessment, 20 interviews were conducted, 19 documents and programs were reviewed, and two facility visits were made to observe the SSOs walking down their systems. A list of documents reviewed and interviews performed is located in Attachment C. The review identified three Strengths, one Finding, and three Observations which are summarized as follows:

Strengths

PGM.1-S-1: The SRS SSO function has been effectively implemented by the SRS staff and management. The SSOs are qualified and are effectively performing their SSO responsibilities.

TQ.1-S-1: SSO qualification requirements are well crafted to implement applicable requirements with an emphasis on practicable application for the SSOs.

OP.1-S-1: SSO personnel perform frequent assessments using a comprehensive assessment management system.

Findings

PGM.1-F-1: Documentation of an SSO Qualification Program has not been incorporated into the Technical Qualification Program (TQP). The DOE-SR Functions, Responsibilities, and Authorities Procedure recognizes this requirement; however the change to implement it is still in the administrative approval process. Qualification Officials were appointed and the qualification function successfully performed however, in spite of the lack of official program documentation, due to several managers' commitment to the activity.

Observations

PGM.1-OBS-1: The DOE-SR Qualifying Official List has not been updated to include the SSO Program. A standalone list is located on the SRS web site listing the proper officials however.

PGM.1-OBS-2: SSO performance requirements of DOE M 426.1-1A are invoked by annual Personnel Development Plans and the commitment of key managers. However, SRS has no documented requirements that will survive when these managers are no longer driving this activity.

TQ.1-OBS-2: Staff and Management transition has left the Assistant Manager for Closure Projects (AMCP) organization without any required SSO or STSM qualified personnel.

Conclusion

The SRS SSO function has been effectively implemented by the SRS staff and management. The SSOs are qualified and are effectively performing their SSO responsibilities. Management and staff are very supportive of the SSO function and its continued performance. For long term continuation of this activity it is recommended that key functions and requirements identified above be proceduralized and that future selection of SSO managers assure that they are as committed as the current managers.

1.0 INTRODUCTION

This SSO Program Assessment was performed at the request of the SRS Alternate FTCP Agent. The assessment field work was performed November 1 through 4, 2005.

2.0 PURPOSE AND SCOPE

The SRS SSO function was initiated in 2003. In 2004 an independent assessment of its development was conducted. In 2005 this assessment was performed to determine the extent of SSO implementation.

3.0 APPROACH AND DELIVERABLES

This review was performed consistent with the guidance of U.S. Department of Energy (DOE) Handbook (HDBK) 3027-99, *Integrated Safety Management Systems (ISMS) Verification Team Leader's Handbook*, and of DOE Manual 426.1 1A *Federal Technical Capabilities Manual*. The results of this review are intended to provide the SRS with a measure of the progress that has been made in the implementation of their SSO Program.

Criteria and Review Approach Documents (CRAD) were prepared (see Attachment A) using a tailored set of objectives and criteria from the SSO Program requirements documented in DOE Manual 426.1-1A *Federal Technical Capabilities Manual*. The approach established within each CRAD was tailored to specific focus areas, based on the special considerations for the review (see below for details). The results of this assessment were submitted to the SRS FTCP Agent to review and provide factual accuracy comments.

4.0 SCHEDULE

A review plan for this assessment was prepared and approved prior to assessment field activities. Advanced document reviews were also performed. Field activities commenced on November 1, 2005, and were complete on November 4. A draft report was prepared and submitted for factual accuracy review on November 4. The final report was issued on November 10, 2005

5.0 TEAM MEMBERS

Team members are listed below. Individual biographical summaries are included in Appendix B. The team is comprised of the Office of River Protection (ORP) FTCP Agent and the SRS Alternate FTCP Agent. The ORP FTCP Agent will lead the review and provide an external perspective on the effectiveness of SRS's implementation of the SSO Program.

Independent FTCP Agent:	Dana C. Bryson, ORP
SRS Alternate FTCP Agent:	Michael Mikolanis, SRS

6.0 REVIEW RESULTS

The on-site assessment was performed over the course of four days. During the assessment, 20 interviews were conducted, 19 documents and programs were reviewed, and two facility visits were made to observe work activities. A list of documents reviewed and interviews performed in located in Attachment C. The Strengths, Findings, and Observations identified by the team are listed in Sections 6.1, 6.2, and 6.3.

Objective PGM.1

The SRS SSO function has been effectively implemented by the SRS staff and management. The SSOs are qualified and effectively performing their SSO responsibilities. Facility Representatives (FR) were aware of the SSOs role and were actively working with their counterparts. Contractor engineering managers noted that their System Engineers are effectively interfacing with the SSOs. The SSOs have an established history of assessing safety systems and the contractor's system engineers.

DOE and Contractor management understood and were very supportive of the SSO function. They clearly understood the SSO role and relationship to FRs and contractor System Engineers. Continued commitment to the SSO function was consistently expressed. Appointment of new SSOs to vacated positions shows a continuing commitment and process for SSO staffing needs are met.

Documentation of an SSO Qualification Program has not been incorporated into the TQP. The DOE-SR Functions, Responsibilities, and Authorities Procedure recognizes this requirement; however the change to implement it is still in process. Qualification Officials were appointed and the qualification function successfully performed however, in spite of the lack of official program documentation, due to several managers' commitment to the activity. But, the DOE-SR Qualifying Official List has not been updated to recognize these Qualifying Officials and the SSO Qualification Program. A standalone list is located on the SRS web site listing the proper officials.

The SSOs were knowledgeable of the facility safety basis and the associated safety systems. Personnel interviewed were authorization basis engineers prior to qualifying SSO and had a good understanding of that area. The SSOs maintained the authorization basis engineer role as a collateral duty, which appears to be working well.

The SSO performance requirements of DOE M 426.1-1A are invoked by annual Personnel Development Plans and the commitment of key managers. SRS has no documented requirements that will survive these managers. Even the standardized qualification cards are not documented or referenced by procedure.

Objective TQ.1

SSO qualification requirements are well crafted to implement applicable requirements with an emphasis on simplicity and practicable application of the SSO function. This was supported by a series of practicable application based training. As a result the SSOs were able to qualify while executing much of the work load and responsibilities in their AB and SSO roles.

Nineteen personnel have been designated as SSOs. One of these was newly appointed and one was formally provided with a qualification extension. The remaining 17 SSOs are fully qualified. The final walkdown for one of these SSOs was observed during this assessment. This has resulted in full qualification of initial SSOs at SRS and demonstrates a strong commitment from management and staff.

The SSO management are all Senior Technical Safety Manager (STSM) qualified with the exception of vacancies and new appointments. Staff and Management transition has left the AMCP organization without any required SSO or STSM qualified personnel. The Assistant Manager (AM) position is vacant and none of the recently appointed Division Directors have yet qualified as STSMs. In addition, the only SSO position

was recently filled and is in the process of qualifying. The SRS Deputy Manager is currently the only STSM in the SSO's chain of command.

Objective MG.1

SSO qualification cards have been developed for the SRS site. These qualification requirements are well crafted to implement applicable requirements with an emphasis on simplicity and practicable application for the SSOs. SSO Performance Development Plans direct them to perform SSO qualification and performance responsibilities and evaluate their performance.

SSO positions and the personnel filling these positions have been identified. Qualification schedules have been established and are progress is tracked. Supervisors facilitate SSO qualification and have implemented practicable application based training. In the instance where an SSO candidate was behind schedule for qualification an official letter of warning was placed in his personnel folder.

Individual Development Plans (IDP) are used to identify training needs and fill them with available training. Additional emphasis should be placed on maintenance of SSO qualifications now that personnel are qualified.

The SRS has implemented an independent assessment of the SSO function annually since its inception. Management is very receptive to evaluation and suggestion.

Objective OP.1

SSO system assessments evaluate the contractor System Engineers and System Engineering Program on a regular basis. These evaluations are covered by the assessment lines of inquiry included in SIMTAS. No cumulative assessment of the System Engineering Program has been performed however, one is scheduled for FY 2006. Interviews with SSOs, FRs, and System Engineering managers show that SSO personnel maintain regular communication and interface with their counterpart FRs and System Engineers.

Objective OP.2

Interviews with SSOs showed them to be knowledgeable of system status, performance, maintenance, operations, design, and vulnerabilities of their facility systems. Interviews with FRs showed that they recognized these capabilities in their SSOs and made use of them in these areas. FRs considered the SSOs to be a valuable resource. SSO assessments identified technical issues which were tracked to resolution.

SSO personnel work closely with the FRs in both their SSO role and their Authorization Basis Role. SSOs also work with FRs on system status, configuration control, system requirements, troubleshooting, investigations, root cause evaluations, and corrective actions. They are also assigned to all safety systems and other systems in their facility. This combination of roles and responsibilities appears to be very complimentary and useful in supporting the FRs and other site customers.

SSO personnel understand the need to stop work when eminent safety hazards are present. They also understand that when possible potential safety concerns and other issues can be worked through the contractor management and FRs. The SSOs also have ongoing status meetings with their management and ready access to senior management.

6.1 Strengths

PGM.1-S-1: The SRS SSO function has been effectively implemented by the SRS staff and management. The SSOs are qualified and are effectively performing their SSO responsibilities. FRs were aware of the SSOs role and were actively working with their counterparts. SSOs have an established history of assessing safety systems and the contractor's system engineers.

TQ.1-S-1: SSO qualification requirements are well crafted to implement applicable requirements with an emphasis on simplicity and practicable application for the SSOs. This was supported by a series of practicable application based training. As a result the SSOs were able to qualify while executing much of the work load and responsibilities in their AB and SSO roles.

OP.1-S-1: SSO personnel perform frequent assessments using a comprehensive assessment management system. The Site Issues Management and Technical Assessment System (SIMTAS) is used by both SSOs and FRs to plan, document and track assessments and issues. Lines of inquiry included in the SSO assessment area are very comprehensive and cover safety systems Authorization Basis requirements, the contractor System Engineering program, and cognizant System Engineering qualifications.

6.2 Findings

PGM.1-F-1: Documentation of an SSO Qualification Program has not been incorporated into the TQP. The DOE-SR Functions, Responsibilities, and Authorities Procedure recognizes this requirement; however the change to implement it is still in process. Qualification Officials were appointed and the qualification function successfully performed however, in spite of the lack of official program documentation, due to several managers' commitment to the activity.

6.3 Observations

PGM.1-OBS-1: The DOE-SR Qualifying Official List has not been updated to include the SSO Program. A standalone list is located on the SRS web site listing the proper officials however.

PGM.1-OBS-2: SSO performance requirements of DOE M 426.1-1A are invoked by annual Personnel Development Plans and the commitment of key managers. SRS has no documented requirements that will survive these managers. Even the standardized qualification cards are not documented or referenced by procedure.

TQ.1-OBS-2: Staff and Management transition has left the AMCP organization without any required SSO or STSM qualified personnel. The AM position is vacant and none of the recently appointed Division Directors have yet qualified as STSM. In addition the only SSO position was also recently filled and is in the process of qualifying. The Deputy Manager is currently the only STSM in the SSO's chain of command.

7.0 OVERALL RESULTS FOR THE GENERAL REVIEW OBJECTIVES

The SRS SSO function has been effectively implemented by the SRS staff and management. The SSOs are qualified and are effectively performing their SSO responsibilities. FRs were aware of the SSOs role and were actively working with their counterparts. Contractor engineering managers noted that their System Engineers are effectively interfacing with the SSOs. SSOs have an established history of assessing safety systems and the contractor's system engineers.

DOE and Contractor management understand and are very supportive of the SSO function. They clearly understand the SSO role and its relationship to FRs and contractor System Engineers. Continued commitment to the SSO function was consistently expressed. Appointment of new SSOs to vacated positions shows a continuing commitment and a process for meeting future SSO staffing needs. Future selection of SSO managers should assure that they have a comparable commitment to the SSO function.

SSOs were knowledgeable of the facility safety basis and the associated safety systems. Personnel interviewed were authorization basis engineers prior to qualifying SSO and have a good understanding of that area. SSOs maintained the authorization basis engineer role as a collateral duty, which appears to be working well.

SSO personnel work closely with the FRs in both their SSO role and their Authorization Basis Role. They are also assigned to all systems in their facility. This combination of roles and responsibilities appears to be very complimentary and useful in supporting the FRs and performing their function as SSOs. For long term continuation of this activity it is recommended that key functions and requirements identified above be proceduralized.

Attachment A – Criteria and Review Approach Documents

PROGRAM (PGM)

OBJECTIVE

PGM.1 An effective SSO Program is established by the Field Element Manager to apply engineering expertise to maintain safety system configuration and to assess system condition and effectiveness of safety management program (SMP) implementation.

Criteria

PGM.1.1 The SSO Qualification Program is part of the TQP (DOE M 426.1-1A, Chapter III, Section 1, 2.b (1)).

PGM.1.2 The SSO Program establishes appropriate training, qualification, and performance requirements for SSO personnel and the supervisors are held accountable for achieving them (DOE M 426.1-1A, Chapter III, Section 1, 2.b (2)).

PGM.1.3 The safety systems and SMPs included in the SSO Program align with those systems and programs identified in the applicable Documented Safety Analysis (DSA) (DOE M 426.1-1A, Chapter III, Section 1, 4.c).

PGM.1.4 SSO requirements are defined and implemented, for example, functions, responsibilities, and authorities of personnel assigned to perform SSO and their interface/support of FR are clearly defined, and SSO staffing needs are identified and there is a plan or process to ensure future staffing needs are met and maintained (DOE M 426.1-1A, Chapter III, Section 1, 2.b (3) & (4)).

PGM.1.5 Affected DOE and contractor managers understand the SSO role and relationship to FRs and the contractor's cognizant System Engineers, and provide the necessary access and support (DOE M 426.1-1A, Chapter III, Section 1, 3.d).

PGM.1.6 Qualifying Officials are assigned to sign site-specific Qualification Cards (DOE M 426.1-1A, Chapter III, Section 1, 2.b (6)).

PGM.1.7 The SSO Program contains features to verify that SSO candidates possess the required level of knowledge and/or skills to perform assessments and investigations to confirm performance of safety systems in meeting established safety and mission requirements (DOE M 426.1-1A, Chapter III, Section 1, 2.b (5)).

Approach

Record Review: Review documentation (e.g., site technical qualification program documents, SSO Program Plan, SSO Program procedures, qualification cards and/or standards, internal memorandums, DSAs, etc.) which establish the SSO Program and describe its implementation to determine that the program is complete and comprehensive.

Interviews: Interview management personnel with responsibilities for implementing and executing the SSO program to determine if they are familiar with the role of SSO personnel relative to the FRs and the contractor's cognizant system engineers, if they provide adequate resources for training, qualification, future staffing, and performance of SSO personnel, and if they appropriately qualified to perform their

assigned role in the SSO program. Interview qualifying officials to determine if they are familiar with their role and responsibility, they are currently qualified, and they are performing their assigned role.

Field Observation: Evaluate any process used by or directed by the Field Element Manager to determine the effectiveness of SSO Program Performance.

TRAINING AND QUALIFICATION (TQ)

OBJECTIVE

TQ.1 SSO personnel and supervisors with responsibilities for SSO personnel are appropriately trained and qualified, or are in the process of achieving qualification.

Criteria

TQ.1.1 Supervisors with responsibilities for SSO personnel maintain STSM qualification (DOE M 426.1-1A, Chapter III, Section 1, 2.c (1)).

TQ.1.2 Site-specific qualification standards and cards have been developed and a documented process is implemented to assure that SSO candidates meet, at a minimum, the SSO knowledge, skills, and abilities specified in the *Federal Technical Capability Manual* (DOE 426.1-1A, Chapter III, Section 1, 5.a & 5.b)

TQ.1.3 All SSO personnel have completed or are completing the General Technical Base Qualification Standard (DOE-STD-1146-2001) and one or more Functional Area Qualification Standard(s) in a technical area linked to their individual job descriptions (DOE M 426.1-1A, Chapter III, Section 1, 4.a).

TQ.1.4 All SSO personnel have completed or are completing the site-specific qualification standard associated with assigned safety systems (DOE M 426.1-1A, Chapter III, Section 1, 4.a).

TQ.1.5 SSO Supervisors have established methods to assign initial qualification dates, track progress toward qualification, and ensure retraining/requalification occurs as required for each SSO candidate in the qualification process (DOE M 426.1-1A, Chapter III, Section 1, 2.c (4) through (6)).

Approach

Record Review: Review qualification records to establish that supervisors and managers of SSO are qualified as an STSM and that SSO personnel are trained and qualified. Review qualification and requalification schedules, staffing plans, training plans, travel funding, etc. to determine that sufficient resources are provided for training, retraining, qualifying, and requalifying SSO personnel.

Interviews: Interview supervisors, training coordinators, SSO personnel, and budget personnel to establish that training and qualification plans and schedules are being executed as planned and that sufficient resources are provided to meet the schedules.

Field Observation: Observe activities associated with the qualification process, such as qualification boards, exams, walk throughs to determine that the training and qualification process is implemented and functioning effectively.

MANAGEMENT (MG)

OBJECTIVE

MG.1 SSO Supervisors effectively perform their SSO program responsibilities.

Criteria

MG.1.1 Site-specific SSO qualification standards and cards are developed (DOE M 426.1-1A, Chapter III, Section 1, 2.c (2)).

MG.1.2 Supervisors have identified and approved SSO candidate selection (DOE M 426.1-1A, Chapter III, Section 1, 2.c (3)).

MG.1.3 Supervisors of SSO personnel have established SSO personnel qualification schedules and are tracking progress (DOE M 426.1-1A, Chapter III, Section 1, 2.c (4)).

MG.1.4 Supervisors facilitate SSO qualification (e.g., ensure sufficient time and training are provided to complete qualification tasks) (DOE M 426.1-1A, Chapter III, Section 1, 2.c (5)).

MG.1.5 Supervisors ensure SSO personnel are trained and qualified to perform assigned duties (DOE M 426.1-1A, Chapter III, Section 1, 2.c (6)).

MG.1.6 SSO responsibilities are included and measured in Individual Performance Plans (IPP) (DOE M 426.1-1A, Chapter III, Section 1, 2.c (7)).

MG.1.7 Ensure SSO qualifications are maintained current by training and assignments planned in Individual Development Plans (DOE M 426.1-1A, Chapter III, Section 1, 2.c (8)).

MG.1.8 SSO Supervisors periodically evaluate program effectiveness and implement corrective actions in a timely manner (DOE M 426.1-1A, Chapter III, Section 1, 2.c (9)).

Approach

Record Review: Review qualification cards, IPPs, and other SSO program documents and procedures to establish that managers and supervisors are effectively performing their responsibilities as defined in the SSO program. Review other documentation used by supervisors to establish SSO program effectiveness and implementation of corrective actions.

Interviews: Interview supervisors and managers to establish that they are familiar with their assigned roles, they perform their assigned duties, monitor the effectiveness of the SSO program and ensure any identified corrective actions are implemented.

Field Observation: Observe any activities associated with SSO program effectiveness evaluations and/or corrective action implementation.

OVERSIGIIT PERFORMANCE (OP)

OBJECTIVE

OP.1 Collectively, SSO personnel provide oversight of the Contractors' System Engineer Program.

Criteria

OP.1.1 Oversight performed by SSO personnel establishes that the contractor System Engineer Program is effectively implemented with goals, objectives, and performance measures (DOE M 426.1-1A, Chapter III, Section 1, 2.a (1)).

OP.1.2 SSO personnel maintain communication with the contractor's cognizant System Engineer (DOE M 426.1-1A, Chapter III, Section 1, 2.a (1)).

OP.1.3 SSO personnel monitor performance of the contractor's cognizant System Engineer Program (DOE M 426.1-1A, Chapter III, Section 1, 2.a (1)).

OP.1.4 SSO personnel attend selected contractor meetings with FRs and contractor personnel responsible for system performance (e.g., cognizant System Engineers, design authorities, and program managers) (DOE M 426.1-1A, Chapter III, Section 1, 2.a (3)).

Approach

Record Review: Review oversight documentation, such as SSO assessment reports, SSO walk throughs, correspondence, SSO activity records or logs, corrective action documents, etc. to establish that SSO personnel are overseeing implementation and execution of the contractor system engineer program. Review the contractor's system engineer program to determine whether there are any program weaknesses or deficiencies that have not been identified by SSO personnel.

Interviews: Interview SSO personnel, FRs, and contractor system engineers to establish the level of interface between SSO personnel and the contractor's cognizant system engineers.

Field Observation: Observe any oversight activities of the contractor's system engineer program performed by SSO personnel.

OBJECTIVE

OP.2 SSO personnel are knowledgeable and familiar with assigned safety systems and/or programs.

Criteria

OP.2.1 A qualified SSO is, in fact, knowledgeable of the system status, performance, maintenance, operations, design, and vulnerabilities of their assigned systems or programs. This is evidenced by:

OP.2.1.1 SSO personnel regularly and routinely review periodic system health/status reports (DOE M 426.1-1A, Chapter III, Section 1, 2.a (2)).

OP.2.1.2 SSO personnel review test results, investigation reports, root cause analyses, etc (DOE M 426.1-1A, Chapter III, Section 1, 2.a (2)).

OP.2.1.3 SSO personnel interface with external organizations that can provide insights on performance (DOE M 426.1-1A, Chapter III, Section 1, 2.a (2)).

OP.2.1.4 SSO personnel perform assessments, periodic evaluations of equipment configuration and material condition and SMP implementation (DOE M 426.1-1A, Chapter III, Section 1, 2.a (3)).

OP.2.1.5 SSO personnel evaluate the effects of aging on system equipment and components, the adequacy of work control and change control processes, and consider the appropriateness of system maintenance and surveillance activities with respect to reliable performance of safety function(s) (DOE M 426.1-1A, Chapter III, Section 1, 2.a (3)).

OP.2.1.6 SSO personnel identify technical issues and participate actively in the resolution of the issues.

OP.2.2 Safety systems and SMPs have established goals, objectives, and performance measures

OP.2.3 SSO personnel perform evaluations of contractor troubleshooting, investigations, root cause evaluations, and selection and implementation of corrective actions, in conjunction with FRs (DOE M 426.1-1A, Chapter III, Section 1, 2.a (4)).

OP.2.4 SSO personnel provide support to other Federal employees, as appropriate. (DOE M 426.1-1A, Chapter III, Section 1, 2.a (5))

OP.2.5 SSO personnel assess contractor compliance with relevant DOE regulations, industry standards, contract requirements, safety basis requirements, and other system requirements (DOE M 426.1-1A, Chapter III, Section 1, 2.a (6)).

OP.2.6 SSO personnel confirm configuration documentation, procedures, and other sources of controlling information are current and accurate (DOE M 426.1-1A, Chapter III, Section 1, 2.a (7)).

OP.2.7 SSO personnel report potential or emergent hazards immediately to DOE line management and FRs (DOE M 426.1-1A, Chapter III, Section 1, 2.a (8)).

OP.2.8 SSO personnel stop tasks, if required, to prevent imminent impact to the health and safety of workers and the public, to protect the environment, or to protect the facility and equipment and immediately notify the on-duty or on-call FR (DOE M 426.1-1A, Chapter III, Section 1, 2.a (8)).

OP.2.9 SSO personnel serve, when assigned, as qualifying officials in the development or revision of Functional Area Qualification Standards, mentor assigned backups, and qualify other candidates to the Functional Area Qualifications Standards needed to achieve SSO qualification (DOE M 426.1-1A, Chapter III, Section 1, 2.a (9)).

OP.2.10 SSO personnel maintain cognizance of the appropriate funding and resources to maintain and improve safety systems (DOE M 426.1-1A, Chapter III, Section 1, 2.a (10)).

OP.2.11 Methods have been established for SSO personnel to routinely communicate system/program performance information and issues with STSMs and the Field Office Manager (DOE M 426.1-1A, Chapter III, Section 1, 2.a (1)).

Approach

Record Review: Review oversight documentation, such as SSO assessment reports, SSO walk through, correspondence, SSO activity records or logs, corrective action documents, etc. to establish that SSO personnel are performing required oversight. Review contract requirements and their flow down through the contract to the safety systems and SMPs to establish the effectiveness of SSO personnel oversight that the contractor complies with all requirements relative to safety systems and programs. Review a sample of the safety system health reports, safety system test reports, safety system investigation reports, safety system root cause analyses, etc. to determine the effectiveness of SSO personnel knowledge and familiarity with this information.

Interviews: Interview SSO personnel to determine their knowledge of and familiarity with assigned safety systems and SMPs, and the reports that the contractor may generate in relation to the systems and programs.

- Field Observation: Observe SSO personnel walk downs and other activities in the field to establish the level of SSO personnel knowledge and familiarity of safety systems.

Attachment B – Team Member Biographical Summaries

Team Member Biographical Summaries

Dana C. Bryson is the Tank Farms Engineering Division Director at ORP, where he is responsible for regulation and oversight of the nuclear safety basis and engineering activities. Mr. Bryson has over 22 years of engineering experience in the nuclear field. He holds a Bachelor of Science degree in Chemical Engineering from Oregon State University.

Previously, as the ORP Operations Program Division Director, Mr. Bryson was responsible for oversight of operations activities. Other positions he held with the DOE Richland Operations Office were Spent Nuclear Fuels Division Deputy Director and Liquid Effluent Branch Chief. Mr. Bryson has served in, led, and commissioned Operational Readiness Reviews, Safety Evaluation Report Independent Review Teams, Source Evaluation Boards, and ISM reviews. Mr. Bryson recently led the ORO ISMS Review. He is a certified STSM and is the ORP FTCP Agent.

Prior to joining DOE, Mr. Bryson held a variety of positions at Puget Sound Naval Shipyard, including Lead Nuclear Refueling Equipment Engineer and Shift Refueling Engineer. In these positions, he was responsible for designing, testing, maintaining, troubleshooting, and repairing equipment used to refuel naval nuclear reactors, as well as conducting refueling shift operations.

Michael Mikolanis holds a Bachelor of Science in Nuclear Engineering from Purdue University, a Masters of Science in Environmental Engineering from the Georgia Institute of Technology, and holds a license as a professional engineer in the State of Maryland. He has completed qualifications as a STSM. Michael is currently the Director of Engineering for Waste Disposition Project facilities at the Savannah River Operations Office and has approximately 22 years of nuclear industry experience at the DOE, Bechtel Power Corporation, and the Department of the Navy. Previous positions include liaison to the Defense Nuclear Facilities Safety Board; Bechtel's lead licensing engineer for the Calvert Cliffs Nuclear Power Plant electrical distribution upgrades; and qualification as a senior supervisory watch officer at three naval nuclear power plant facilities – including qualification as a Naval Nuclear Engineer Officer. Michael is certified as a team leader for verifying implementation of Integrated Safety Management (ISM) Systems. He led the RA team for the Fernald Silo 3 project, two ISM verification teams at Hanford, and served as a sub-team leader for four other ISM reviews.

Attachment C – Summary of Documents Reviewed and Personnel Interviewed

Documents reviewed:

- The Federal Technical Capability Panel Manual DOE M 426.1-1A;
- DOE SR Technical Training and Qualification Plan, SRM 300.1.1B, Chapter 6, Section 6.1, Rev 0;
- DOE SR Functions, Responsibilities, and Authorities Procedure. SRM 300.1.1B, Chapter 1, Section 1.1, Rev 3;
- S-Area Defense Waste Processing Facility Final Safety Analysis Report, WSRC-SA-6, Chapter 4, Rev 23, Safety Structures, Systems, and Components;
- Concentration, Storage, and Transfer Facility, WSRC-SA-2002-00007, Rev. 3, Chapter 4, Rev 23, Safety Structures, Systems, and Components;
- Savannah River Site Solid Waste Management Facility Safety Analysis Report, WSRC-SA-22, Rev.5, Chapter 4, Safety Structures, Systems, and Components;
- TQP Qualification List;
- DOE-SR Qualifying Official List;
- DOE-SR Web Page Qualifying Official List for SSO;
- DOE-SR Web Page Qualifying Official List for STSM;
- Site Issues Management and Technical Assessment System;
- SSO Assessment Records;
- SSO Qualification Card;
- SSO Training Materials; and
- Training records for five SSOs.

Personnel interviewed:

- SRS Deputy Manager;
- Assistant Manager for Nuclear Material Stabilization Project;
- Director, Nuclear Material Engineering Division;
- Director, Nuclear Material Programs Division;
- Director, Waste Disposition Engineering Division;
- SSO personnel (8);
- FRs (5); and

- Westinghouse Engineering Managers (2).

Field walkdowns were conducted of two systems with SSO candidates in order to assess their level of qualification knowledge and skills. One walkdown was performed as the SSO's Final Walkthrough for completion of their SSO Qualification Card.

SSO Assessment C/A Status

_ Corrective actions have been completed.

SSO Qualification Status

All SSOs have completed SSO training and qualification except for Mr. Gregory Johnson who recently became a candidate SSO and is training for SSO qualification.