
Westinghouse Savannah River Company Radiological Improvement Strategic Plan



**2006
Revision 7**

**Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808**

Executive Summary

The WSRC Radiological Improvement Strategic Plan (RISP) provides the vision for SRS to promote continuous improvement in the SRS Radiological Control Program while at the same time achieving the most cost-effective program possible consistent with Integrated Safety Management (ISM) principles and functions. It defines strategies for improving the site's radiological control program and major milestones for achieving those goals, which are consistent with new missions and opportunities described in the SRS Strategic Plan. It is imperative that the site demonstrates continuous improvement by enforcing the workforce competencies necessary for successful execution of operations at SRS.

The RISP is endorsed by the Site ALARA Committee. Any site-level procedure or policy changes require the approval of the Site Policy and Procedure Council (SPPC). The RISP is issued each year to be available as a planning and budgeting tool for organizations in preparation of out-year budgets. It is understood, however, that with budget uncertainties, not all strategies may receive funding or priority. Therefore, the good faith strategies represent the intent of WSRC management to provide for continuous improvement in the site radiological protection programs, given uncertain funding issues and priorities.

Key strategies identified for safely improving the radiation protection program and enhancing cost-effectiveness are:

- Radiological Engineering: Site projects and emergent work will incorporate engineered radiological controls to minimize occupational radiation exposure and contain radioactive contamination at its source thereby reducing the life cycle costs of facility operations.
- Radiation and Contamination Control Training: SRS radiological workers will be trained and qualified commensurate with their level of responsibility for and involvement in radiological work.
- Optimization of Radiological Operations: A program is established to upgrade the quality and efficiency of equipment and processes of radiological control operations.
- Radiological Control Staffing: The radiological control organization will provide a flexible workforce of Radiological Control Inspectors, Advanced Radiological Workers, Multi-Skilled Technicians, etc., that can be rapidly deployed to meet high priority needs of the site.
- Deactivation and Decommissioning - Efficiently configure and optimize radiological support to satisfy mission requirements. Radiological activities associated with deactivation and decommissioning will follow the ISM principles to ensure that prescribed radiological controls are commensurate with the radiological risk.

The following benefits will be recognized with the implementation of the Radiological Improvement Strategic Plan:

- Improved control of contamination at the source
- Efficient, cost-effective job planning and safe execution of work
- Competent workforce trained and qualified to the appropriate hazard level and responsibility
- Reduced radiation dose to “ALARA”
- Upgraded quality and efficiency of radiological equipment
- Cost-effective radiological control practices are implemented
- Cost-effective radiological control support to facilities
- Efficient use of infrastructure to support new mission requirements
- Optimized radiological program providing the technical skills in support of new missions.

The Site ALARA Committee periodically reviews the RISP and may revise the goals and supporting statements to maintain the site’s momentum in advancing the occupational radiation protection program at the Savannah River Site.

Signature on file _____
N. D. Johnson, Regulatory and Radiological Technology
Radiological Protection Services

12/05/2005 _____
Date

Signature on file _____
H. J. Stafford, Manager
Radiological Protection Services

12/05/2005 _____
Date

Signature on file _____
L. H. Sain, Chairman
Site ALARA Committee

12/05/2005 _____
Date

Strategic Goal A: Radiological Engineering	
Objective	
Site projects and emergent work will incorporate engineered radiological controls to contain radioactive contamination at its source thereby reducing the life cycle costs of facility operations.	
Plans for Achieving Goal A	Measures
A.1 Enhance planning and incorporate the use of new technologies for radiological work activities to promote cost-effective hazard reduction.	Collective dose and costs are reduced. <i>Responsibility: RPS - Jim Stafford (T. Padezanin/N. Johnson)</i>
A.2 Provide appropriate radiological design support for all new projects to ensure cost-effective solutions are implemented to control radiological hazards.	Facilities incorporate appropriate radiological design features. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>
A.3 Increase the SRS ALARA Center efforts in waste minimization/pollution prevention and radiological hazard reduction for safe and cost-effective operations. Optimize the use of engineered containments to minimize the spread of contamination.	Facilities incorporate new technologies for radiological work and waste minimization and pollution prevention activities. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>
A.4 The SRS ALARA Center continues to be the east coast ALARA Center of Excellence.	Other sites utilize services of the ALARA Center. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>
A.5 Continue to implement in-field presence via rotational assignments of ALARA Center personnel in areas of interest	ALARA Center personnel continue in-field presence and rotational assignments. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>
A.6 Involvement of Radiological Engineering to provide support for new missions.	Radiological Engineering support for new missions. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>

Strategic Goal B: Radiation and Contamination Control Training	
Objective	
SRS radiological workers will be trained and qualified commensurate with their level of responsibility for and involvement in radiological work.	
Plans for Achieving Goal B	Measures
B.1 Identify the use of the Advanced Radiological Worker Training (ARWT) program to allow radiological workers to perform specified monitoring.	Identified groups are trained and performing radiological control work within the scope of their training. <i>Responsibility: Facility Managers Forum - Dave Olson</i>
B.2 Analyze data obtained through the Post-Training Evaluation Process for applicability to Radiological Training Programs	Revisions to training programs incorporate applicable data obtained through Post-Training Evaluations (i.e. retention testing and in-field observations). <i>Responsibility: RPS - Jim Stafford (R. Lorenz/H. Martin)</i>
B.3 Support 2006 Annual Training (a.k.a., Block) and exchange latest developments of the ALARA Center.	ALARA Center personnel continue to support Annual Block Training through presentations and tours. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>
B.4 Integrate ALARA Center into Radiological Worker Training.	ALARA Center supports Radiological Worker Training. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>
B.5 Integrate the ALARA Center into Mock-Up training.	ALARA Center supports RadCon Mock-Up Training. <i>Responsibility: RPS - Jim Stafford (N. Johnson)</i>

Strategic Goal C: Optimization of Radiological Operations	
Objective	
A program is established to upgrade the quality and efficiency of equipment and processes of radiological control operations.	
Plans for Achieving Goal C	Measures
C.1 Improve the cost-effectiveness of radiological control practices through the introduction of new technologies and improved methods for radiation monitoring.	Radiological control of work activities is improved. <i>Responsibility: RPS - Jim Stafford (T. Padezanin)</i>
C.2 Maintain and improve recently implemented radiological control software to improve access control, and track and report employee doses.	New software implemented and updated as conditions warrant. <i>Responsibility: RPS - Jim Stafford (T. Padezanin)</i>
C.3 Identify areas or other opportunities where survey frequencies should be established based on potential radiological conditions, probability of change in conditions, and area occupancy considerations to provide adequate radiological control for personnel.	Radiological survey programs are modified as facility changes dictate. <i>Responsibility: Area Radiological Control Managers</i>
C.4 Modify WSRC radiological clearance methodologies as necessary to maintain compliance with DOE requirements while minimizing implementation costs.	WSRC procedures are consistent with DOE requirements and costs are minimized. <i>Responsibility: RPS - Jim Stafford (K. Crase)</i>
C.5 Establish and maintain appropriate interfaces and procedures to promote cost-effectiveness and maintain adequate radiological protection programs within all business units.	Streamline Radiological Control procedures to be more cost-effective with no violations to 10CFR835. <i>Responsibility: RPS/Area Radiological Control Managers</i>

Strategic Goal D: Radiological Control Staffing	
Objective	
The radiological control organization will provide a flexible workforce of Radiological Control Inspectors, Health Physics Professionals, Multi-Skilled Technicians, etc., that can be rapidly deployed to meet high priority needs of the site.	
Plans for Achieving Goal D	Measures
D.1 Leverage subcontracted Radiological Control Technicians (RCTs) to ensure coverage through variations in staffing requirements.	Continued radiological coverage. <i>Responsibility: RPS - Jim Stafford, Business Units</i>
D.2 Align WSRC Radiological Control Inspector (RCI) baseline staffing levels in accordance with facility hazard and multi-level staffing analysis, while increasing the use of alternative radiological control staffing.	Cost-effective WSRC RCI baseline staffing levels are maintained. <i>Responsibility: RPS - Jim Stafford, Business Units</i>
D.3 Maximize flexibility of Radiological Control assets to rapidly deploy to meet Deactivation and Decommissioning project needs.	Radiological Control assets are readily available for deployment. <i>Responsibility: RPS - Jim Stafford, SDD - G. Chandler</i>
D.4 In order to provide adequate radiological engineering support for new and existing missions, retrain existing workforce or hire new professionals.	Adequate radiological engineering support is provided. <i>Responsibility: RPS - Jim Stafford (N. Johnson, T. Padezanin)</i>
D.5 Continue to provide Radiological Assistance Program (RAP) resources.	Meet training and deployment responsibilities. <i>Responsibility: RPS - Jim Stafford (R. Lorenz/G. Weaver)</i>

Strategic Goal E: Deactivation and Decommissioning	
Objective	
Efficiently configure and optimize radiological support to satisfy mission requirements. Radiological activities associated with deactivation and decommissioning (D&D) will follow the ISM principles to ensure that prescribed radiological controls are commensurate with the radiological risk.	
Plans for Achieving Goal E	Measures
E.1 Encourage the appropriate application of risk-based radiological controls for D&D activities in order to implement the principles of ISM and cost effectiveness per Radiological Control Manual 5Q, chapter 3, part 7, by developing and implementing procedures, as needed, through the 5Q1.12 Program Specific RCO Procedure Manual.	Procedures are developed and implemented for low risk D&D activities, as needed. <i>Responsibility: SDD - G. Chandler/G. Tunno</i>
E.2 Investigate and use innovative contamination control techniques to reduce risks and costs in D&D activities.	Contacts with other DOE-complex D&D activities (e.g. Hanford) are maintained and the services of the ALARA Center are utilized. <i>Responsibility: SDD - G. Chandler/ G. Tunno</i>