

memorandum

Savannah River Operations Office (SR)

DATE: **SEP 15 2014**

REPLY TO

ATTN OF: TSD (Y. Gentry, (803) 952-7153)

SUBJECT: Safety Culture Sustainment Plans (Memorandum, Huizenga to Distribution dated 6/27/2014)

TO: Mr. James. M. Whitney, Acting Assistant Secretary for Environmental Management (EM-1), HQ

Thank you for the opportunity to share our plans to sustain a robust safety culture here at the Savannah River Site. DOE-SR and our four prime contractors, Savannah River Nuclear Solutions, LLC (SRNS); Savannah River Remediation, LLC (SRR); WSI-Savannah River Site (WSI-SRS); and Parsons Infrastructure and Technology Group (Parsons) completed self-assessments in order to identify areas requiring action. As described in the attached sustainment plans, all SRS entities are actively addressing common themes that were identified during the self-assessment phase. Each organization has completed a number of actions aimed at improving the site safety culture and are working hard to ensure that a strong safety culture is thoroughly imbedded into all operational activities and training programs. We have developed a number of sustainment tools to focus this endeavor, and to ensure a consistent approach sitewide. Safety has always been an enduring SRS value and will continue to be a central focus in all of our activities.

If you have any questions, please contact me or have your staff contact Sandra Waisley at (803-952-8567


for David C. Moody
Manager

OSQA-14-0124

(5) Attachments:

1. DOE-SR Safety Culture Sustainment Plan
2. SRNS Safety Cultiuere Sustainment Plan
3. SRR Safety Culture Sustainment Plan
4. WSI-SRS Safety Culture Sustainment Plan
5. Parsons Safety Culture Sustainment Plan

cc w/attachments:

- C. J. Jones, (EM-1), HQ
- M. C. Regalbuto, (EM-1), HQ
- C. S. Trummell, (EM-3), HQ
- G. M. MicKinley, (EM-31), HQ
- J. A. Hutton, (EM-40), HQ
- T. N. Lapointe, (EM-41), HQ

Department of Energy Savannah River Operations Office Safety Culture Sustainment Plan September 2014

Introduction

The Department of Energy Savannah River Operations Office (DOE-SR) Safety Culture Sustainability Plan provides implementation schedules for specific tools that have been or will be developed to foster and sustain the DOE-SR safety culture.

DOE-SR's four major contractors, Savannah River Nuclear Solutions, LLC (SRNS); Savannah River Remediation, LLC (SRR); WSI-Savannah River Site (WSI); and Parsons completed development of their respective Safety Culture Sustainability Plans. Similar issues were identified during self-assessments and alignment of the issues will be evaluated by DOE-SR for a unified path forward for improving the Savannah River Site (SRS) safety culture. Where specific/unique issues were identified, the respective contractor developed actions to improve these issues within their organizations described in their sustainability plans.

A common theme identified across the SRS was the need to improve in the areas of leadership attention, problem identification, and effective resolution of issues. DOE-SR and each contractor have identified corrective actions to address the identified issues, but a common SRS approach will be considered. As an example, the contractors have developed or are in the process of developing Safety Culture Monitoring Committees. The purpose of these committees is to provide information for Senior Management attention for early identification of adverse trends. DOE-SR will evaluate the suitability of developing an overarching committee with inclusion from each contractor to review issues for common themes across SRS. Additional improvement tools are identified at the end of this report.

Additional actions by each plan are in alignment with the recommendations described by the Consolidated Report developed in response to the Defense Nuclear Facilities Safety Board Recommendation 2011-1. Representatives from SRS will be attending Safety Conscious Work Environment (SCWE) training in December 2014 led by the Institute of Nuclear Power Operations and plan to utilize the information from this training opportunity to further enhance the sustainability plans.

Self-Assessment Results

A self-assessment was conducted in July 2013 to evaluate the SCWE of the DOE-SR organization. Through the use of structured interviews, document reviews, and field observations, the assessment team (Team) evaluated observed behaviors and beliefs related to SCWE and compared them against the expectations of excellence described within Attachment 10 of DOE Guide 450.4-1C, *Integrated Safety Management System Guide*.

The Team concluded safety is a high priority for the DOE-SR organization. However, some findings were identified that could result in adverse impacts if not addressed. The review resulted in the identification of seven negative observations and five positive observations.

Positive Observations

- The majority of staff responded favorably regarding management presence, awareness, and emphasis on safety. There was evidence of open and frequent communication, presence, and safety awareness enforcement and follow-through.
- The perception of an environment of open communication was generally positive.
- Safety topics are integral to meetings.
- Management uses a variety of tools and techniques to encourage employees to offer innovative ideas, concerns, suggestions, and differing opinions
- Overall, employees felt comfortable raising questions, stopping work as needed and expressing opinions about something they think is not correct.

Negative Observations

- Interview data revealed pockets of inconsistent field presence, engagement, awareness, and knowledge with respect to Management’s visibility to DOE staff. Additional areas for improvement are senior management understanding of direction to address safety issues, including assignment of line management actions.
- DOE has not effectively communicated its policies for a retribution-free environment. Perception exists of unfairness and some degree of retribution for raising concerns on non-safety-related item.
- Poor performers are not held accountable for their performance and in some instances supervisors did not provide clear performance expectations.
- Interviews indicate bullying and humiliation exists in pockets of the organization.
- In some organizations, mistakes were not always used as opportunities to learn.
- Once problems have been identified, many employees do not understand the capabilities resident in the software used to implement DOE’s Corrective Action Program.
- There is a lack of, or lack of awareness of, DOE safety indicator tracking and trending (DOE checking DOE)

Based on this input and other safety issues and concerns, DOE-SR developed an “Organizational Accountability Action Plan outlined below.

DOE-SR Organizational Accountability Action Plan CY 2014
[Integration of Cultural Growth Initiative, SCWE and Employee Viewpoint Survey Results, Diversity/Inclusion Plan Actions, and HR/HC Initiatives]

EFFECTIVE LEADERSHIP

Action Item	Measures
<p>1. Continue SR Cultural Growth Initiative (CGI); Including the Following: Power of Connecting and Ladder of Accountability Training and Discussions; Moody-Buzz Sessions; Meet and Greet Sessions; Brainstorming Sessions with Site Manager; Moody Minutes; and Surveys of Customer Satisfaction</p>	<p>- Complete CGI Power of Connecting Session #3 with Managers/ Staff Completed</p> <p>- Continue/Expand CGI Improving Connections Initiative; Instructor-Led Training for the Administrative Professionals Scheduled in August Completed</p> <p>- Continue and Complete Moody-Buzz Sessions and Maintain Associated Q and A Website; Continue Dave Moody Staff Meet/Greet Meetings. Established a Cultural Growth (CG) Advisory Committee in June (Pioneers concept), comprising peer selected staff members, to advise the CG Champions. Met and received input from the old Pioneers Group in March – June Completed</p> <p>- Brief SR Staff of Survey Results in All Hands Meetings: Completed 1st Quarterly Update on Oct.23rd Completed</p>

	- Hold CGI Champions/Pioneers Brainstorming Session and Discuss Next Steps <i>Completed</i>
2. Performance-Based Culture: Holding Poor Performers Accountable by Communicating Clear Expectations and Mandatory Management Training	- Performance Plans Quality Review (10% sampling) <i>Completed</i> - Performance Improvement Plan/Performance Assistance Plan Process and Implementation Training <i>Completed</i> - Continuous Training for Managers and Supervisors (Online, Instructor-Led, and/or SMTx Meetings) <i>Completed</i> - “Holding Employees Accountable for Performance and Conduct” course by William Wiley (Mandatory) <i>Completed</i> - EVS 2014: Communicate to DOE-SR Staff About Participation <i>Completed</i>

EMPLOYEE ENGAGEMENT/TEAMWORK

Action Item	Measures
1. Develop and Implement New Workforce Succession Planning Strategies and Knowledge Transfer	- On-Boarding Program is Developed, Communicated, and Implemented at DOE-SR by 9/30/14 <i>Completed</i> - Off-Boarding Program is Developed, Communicated, and Implemented at DOE- SR (Oct. 2014 due date) <i>Ongoing</i> - Develop and Implement the DOE-SR Special Emphasis Hiring Action Plan, Including Four Major Programs: <i>DOE Scholars</i> (Summer Interns) <i>completed and onboard 5/19-7/25</i> ; <i>Pathways</i> (Limited Term Interns); <i>Veteran</i> (DoD Warfighter, VEOA, VRA, 30% Disabled), and Direct Hire (for ex., 1102s). Managers Participate in Job Fairs and Mentoring. <i>Completed</i>
2. Communicate to Employees Activities Ongoing and Planned in the DOE-SR Safety Indicator Tracking and Trending Area (“DOE Checking DOE”)	- Initiate Posting of the AMOCSQA <i>Dashboard</i> on SR’s Web Page Making It More Visible to Staff <i>Completed 12/2013</i> - Distribute Monthly Dashboard to Managers, STAR Assessment Coordinators, and Staff via Email (Provide Hot Link to Location on IBMS) and SR Communications and Encourage AMs to Cascade Information Throughout Their Organizations (Staff Meetings) <i>Completed</i>
3. Site Tracking, Analysis, and Reporting (STAR) System Improvements: Process, System, and Training	- Implement a STAR Help Page so that SR Staff can Access Information and Training Slides on STAR <i>Completed</i> - Conduct STAR Training for SR Organizations Upon Request: AMWDP (2/14); SWPF Project (3/14) <i>Completed</i> - Provide Individual Training for STAR Coordinators Upon Request (ex. AMWDP, OHCM, AMIES) <i>Completed</i> - Hold STAR <i>Lunch and Learn</i> Session <i>Completed</i> - Hold Semi-Annual STAR Meetings with SR Organizations’ STAR Coordinators; Schedule Brown Bag Luncheons and Send Out Invites <i>Completed</i> - Process Improvements and System Changes: Integrated Performance Assurance Manual (IPAM) Rev. E and Companion Document; Site-Wide Updates in STAR; and DOE-Specific Updates in STAR. <i>Completed</i> - Other Changes: Sorting Hat Performance Indicators Created – Generates Charts and Lists that Assist STAR Coordinators

	Identify Abnormalities; Develop Additional STAR Internal Functions Such as Orphaned Records, New STAR Trending, and New STAR Reports (Can Track Rejected Actions) Completed
4. Develop a Team Building Initiative, Aligned with the Ongoing SR Cultural Growth Initiative, to Establish Cohesive, Effective, and Successful Teams	- Design, Communicate, and Implement a Team Building/Effectiveness Program by Utilizing One or More Successful Approaches, <i>For Ex., Five Dysfunctions of a Team, Strengths Finder (SF), Emotional Intelligence, and PCM</i> (CGC Meetings held in April - June to discuss different strategy and approach). Selected Strengths Finder 2.0 and PCM Instruments for Phase I. Developed SF Action Plan for CY14. 1 st and 2 nd Sessions were completed with Managers in August. Completed
5. Develop and Implement Partnering Initiative with DOE-SR/SRNS; Establish Three X-Teams: Constructive Analysis, Strategic and Tactical Decision-Making, and Federal Alignment	- Hold 1 st Partnering Session on 11/12-13/13 Completed - Communicate X-Team Concept in DOE-SR/SRNS Partnering Session #1 on 2/24/14 and Establish X-Team #1 (SR/SRNS) Completed - Hold Partnering Session #2 (X-Team #1) with DOE-SR/SRNS Completed - Establish X-Team #2 Completed - Hold Partnering Session #3 (X-Team #2) with DOE-SR/SRNS X-Team #1 will give a presentation Completed - Establish X-Team #3 Completed - Hold Partnering Session #4 (X-Team #3) with DOE-SR/SRNS; Team #2 will give a presentation at this meeting

ORGANIZATIONAL LEARNING

Action Item	Measures
1. Develop and Schedule Brown Bag Sessions with Subject Matter Experts (i.e., Knowledge Capture)	- Develop/Schedule Brown Bag Sessions with SMEs on 3/31/14; 7/31/14; and 9/30/14. SWPF, OHCM, and TSD staff will also present topics – dates TBD Completed
2. Develop and Communicate Technical Continual Learning Program for Managers and Staff	- Schedule/Hold SAF-384 DOE Oversight and Implementation (DOE Order 226.1B): Intermediate-Level Course, Instructor led. Completed - Schedule/Hold SAF-385 Assessment Techniques (DOE Oversight Policy; DOE G 414.1-1B), Management and Independent Assessment Assurance: Intermediate-Level Course, Instructor-Led. Completed
3. Develop Workforce and Succession Planning Process and Approach for FY2014	- Brief SESs and SMTX and Receive Input and Feedback to Finalize Process/Approach Completed - Initiate Conducting Monthly Meetings with AMs/ODs to Discuss Workforce and Succession Strategies and Hiring Initiatives. Conducted Initial Meetings and Communicated Data Call Requests for FY14-19 Workforce and Succession Planning Process Related to LMI Module Requirements. Data Input

	Completed 6/13/14. Discussed in monthly SES meetings. Completed
4. Develop Mentoring Program for DOE-SR	- Brief SMT and Receive Feedback and Buy-In on Approach to Administer Program Completed - Complete SR Implementing Procedure on Mentoring Program. Brainstorming Session Held 5/28 to Review HQ DOE and OPM Information and Discuss Ideas for SR's Approach. Completed

DIVERSITY AND INCLUSION

Action Item	Measures
1. Conduct Recruitment and Selection for Veterans and Disabled Candidates and Identify/Eliminate Barriers.	- Fully Implement the <i>DoD Warfighter Program</i> (See Employee Engagement/Teamwork Section) Completed - Schedule Briefings to SMT and SMTx Members on Recruitment of Veterans and Disabled Candidates, Including Schedule A Appointments (completed 1 st briefing to SMTx on 11/14/13) Completed - Add to the HR Recruitment Work Analysis Worksheet a Checklist Box for Disabled Candidates Consideration by Recruiting Managers Completed - <i>Model EEO Program</i> : Statistical Analysis in D/I Functional Areas (Hire Federal Employee or Procure Support Services) New!
2. Conduct Workforce Inclusion Training	- Develop/Implement Special Emphasis Program: Completed - Conduct "ABCs of EEO" Training for Managers/Staff - D/I Summit 2014 for Managers in Augusta, GA - Develop a Strategy to Integrate Organizational Culture Improvements and Growth Initiatives with Diversity and Inclusion Activities, Including EEO Functional Area New
3. Sustainability and Accountability	- Advise Senior Leaders of D/I Strategy and Expectations Relative to Their Performance Plans - SMT, SMTx, and Other SR Employees Participation in DOE-SRS/HQ Initiated Training - Distribute D/I Plan via the Moody Minutes, Site Email, and DOE-SR Website Completed
4. Responding to Employee Concerns, Requests for More Support; and More Management Involvement	- Employee Concerns Program Process Informational Briefings to SMTx and Staff
5. Conduct Anti-Harassment Training and Discussions	- Develop Project Action Plan for Anti-Harassment Training and Discussion Activity Completed - Conduct <i>No Fear Act</i> Training for All SR Employees (Instructor-Led Training) - Conduct Alternate Dispute Resolution and Mediation Training for SR Managers and Supervisors New

As detailed in the Action Plan, DOE-SR Management has taken the initiative to improve the negative perception of Safety Culture by the federal staff. Contractors and staff have taken actions to address specific issues identified as a result of the safety culture self-assessments performed as part of the Secretarial 2011-1 Implementation Plan. In addition, to those actions, DOE-SR is continuing to partner with its contractors to improve on and develop additional sustainment tools to include:

- Safety Culture Monitoring Panel – Contractors are implementing independent panels within their organizations and would be charged with monitoring the health of the organization's safety culture. DOE-SR is evaluating the suitability of developing an overarching committee with inclusion from each contractor to review issues for common themes across SRS.
- Periodic self-assessment – Envision we will perform periodic safety culture self-assessments. How frequently we will perform them is something we are still evaluating. We will work with Head Quarters to obtain a DOE-wide employee survey tool for use in those self-assessments. Development of the self-assessment tool will be initiated after additional training in SCWE is received in December 2014.
- Benchmarking - We will perform benchmarking reviews of the corrective action program to identify continuous improvement opportunities. Assessments will be managed through the performance assurance systems.
- Performance Indicators - Safety culture performance indicators will be established/matured as applicable and incorporated into periodic senior management performance reviews that are conducted by both contractor and federal organizations.

August 28, 2014

SRNS-U1000-2014-00186
RSM Track No. 10667

Ms. Angela S. Morton
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Office of Contracts Management
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SAVANNAH RIVER M&O CONTRACT DE-AC09-08SR22470; SUBMITTAL OF THE SRNS SAFETY CULTURE SUSTAINMENT PLAN

Ref. Letter, Angela S. Morton to John W. Temple, *Safety Culture Sustainment Plans*, OSQA-14-0092, dated July 30, 2014

The purpose of this letter is to provide to the Contracting Officer the Savannah River Nuclear Solutions, LLC (SRNS) Safety Culture Sustainment Plan as requested in the reference above.

The enclosure describes specific sustainment tools and the plans and schedules for their implementation.

There have been preliminary discussions related to this topic with Scott Nicholson, of the Department of Energy – Savannah River.

Should you have any questions, please contact me at 952-7210 or Dean Van Pelt at 952-9650.

Sincerely,



FOR John W. Temple, Senior Vice President
Contracts Management

dbv/jef

Enc.

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SRNS Safety Culture Sustainability Plan



Prepared by: SRNS Environment, Safety, Security & Health
August 2014
SRNS-IM-2014-00040

Introduction

The SRNS Safety Culture Sustainability Plan provides implementation schedules for specific tools that have been or will be developed to foster and sustain the SRNS safety culture. Safety Conscious Work Environment (SCWE) is an important element in our Integrated Safety Management System (ISMS). However, it is not treated as an independent, stand-alone program by SRNS. As a component of ISMS, SCWE has a synergistic relationship with:

- Behavior Based Safety
- Human Performance
- Performance Metrics
- Differing Professional Opinions
- Employee Concerns
- Self-Assessments and Corrective Action Management

The health of these components has a direct influence on safety culture and continued monitoring of them is necessary. The tools employed for that purpose are described within this plan.

Initial Safety Culture Assessment

An independent team performed an initial self-assessment of SRNS safety culture in March 2012. The six person team was comprised of both corporate and academic resources. Using available information from the U.S. Department of Energy (DOE), Institute of Nuclear Power Operators (INPO) and Energy Facility Contractor Group (EFCOG) the team utilized approximately 40 lines of inquiry to interview over 120 personnel representing a cross section of SRNS. The self-assessment concluded that the overall safety culture at SRNS is healthy and improving, and that employees and managers do not allow production or schedule to compromise safety. The analysis resulted in both positives and areas in need of leadership / management attention.

Positive areas identified:

- Increased emphasis on safety by senior leadership
- Strong personal accountability associated with roles and responsibilities
- Expectations to follow procedural requirements in the execution of work are understood and mature across the Site
- Personnel are aware of the employee concerns program and other avenues available to them for reporting issues

Areas identified for improvement:

- Perception that some managers have a “shoot the messenger” attitude when bringing up problems or bad news
- Employees perceive mixed messages with respect to management support of, and employee participation in, Behavior Based Safety activities
- Employees perceive a different set of safety standards exist for subcontractors
- Awareness and understanding of the Differing Professional Opinion process and Employee Concerns Program
- Avenues for employee recognition are not well understood

Based on this input and other safety issues and concerns, SRNS took the following corrective actions:

- Implementation of the “Call to Action” safety improvement initiative. “Call to Action” was a comprehensive transformation of the SRNS safety culture focused on improvements in ten specific areas; Communication, Safety Leadership, Training, Safety Vision and Culture, Metrics, Recognition/Celebration, Individual Accountability, Safety Organization, Willingness to Challenge, and Workforce Change Management.
- Evaluation of methods to focus the SRNS safety culture vision on new employees and subcontractors
- Establishment of routine safety culture feedback surveys, including birthday month surveys
- Employee Concerns Program / Differing Professional Opinion briefings and associated quarterly employee communications
- Reinforcement of management commitment for Local Safety Improvement Teams

Since the 2012 self-assessment, SRNS has conducted / participated in the following:

- May 2012 : Written Employee Engagement Survey
- May 2013 : Structured Interview of Random SRNS sample
- July 2013 : Electronic survey using the 7 DOE-HQ questions
- July 2013 : Independent Oversight Evaluation Line Self-Assessment of SCWE
- July 2014 : Electronic survey using the 7 DOE-HQ questions
- July 2014 : Field implementation self-assessment of safety climate

Each of these efforts provided valuable feedback to SRNS and played a critical role in the development of current practices.

The table below outlines current practices to sustain the SRNS Safety Culture:

ATTRIBUTE	SUSTAINABILITY
Leadership	
Demonstrated safety leadership	Mentoring Circles, Feeder Forums, All manager meetings with safety culture discussions, monthly safety meetings
Management engagement and time in the field	Leadership Development Forum, President’s Safety Council, Management Field Observations, Senior Supervisory Watches
Open communication and fostering and environment free from retribution	“Ask Carol”, VP All Hands meetings, management round table discussions, Management Newsletter, Dedicated safety communicator, “Observer” newsletter, Annual Safety Expo
Clear expectations of accountability	State of the Plant / Program, Executive Field Observation Metric, Leadership 101 sessions

Employee/Worker Engagement	
Teamwork and mutual respect	Leaders Emerging Among Professionals (LEAP), Aspiring Mid-Career Professionals (AMP), safety communication campaigns, Local Safety Improvement Teams (LSITs), IDEAS, safety and general recognition
Organizational Learning	
Credibility, trust and reporting errors and problems	Error Reporting, fact finding, “See Something – Say Something” campaign
Effective resolution of reported problems	Corrective action process
Performance monitoring through multiple means	Statistical Process Control metrics, Independent Evaluation Board, periodic assessments (VPP review), safety culture birthday month surveys
Questioning Attitude	Senior Supervisory Watch, BBS, Time-Out Program,

Description of Ongoing and Additional Tools that will be used to Sustain and Improve Safety Culture

Safety Culture Steering Team

SRNS established a cross functional SCWE Steering Team in November 2013. The team served as program advocates and as the review board, for both the safety culture survey results and corrective action development. The charter of this team will be broadened to encompass the additional tools detailed within this sustainability plan.

Safety Culture Self-Assessments

SRNS conducted safety culture self-assessments, consisting of electronic surveys and employee interviews. Corrective actions will be developed as necessary and results of these efforts will be shared with employees. Monthly safety culture electronic surveys will resume in January 2015. Those results will serve as a safety culture leading indicator.

Review of DOE-HQ Developed Lines of Inquiry

SRNS will review DOE-HQ-developed lines of inquiry and perform an annual self-assessment. VPP recertification, scheduled for October 2014, will be credited as an independent review. SRNS plans to conduct an additional independent review in FY16 pending available funding.

Benchmarking

Benchmarking discussions were held with the Fluor Government Group Director of Health, Safety, and Environmental in October 2013. Session topics included SCWE, Human Performance Improvement (HPI), Work Planning & Control, Contractor Assurance, and performance metrics. SRNS also hosted a Lawrence Livermore National laboratory (LLNL) benchmarking visit in April 2014. Topics included ISMS, employee engagement in safety

programs, SCWE, and employee recognition. SRNS and Savannah River Remediation (SRR) regularly share opportunities and best practices. The Site’s Integrated Safety Management Integration Council (ISMIC) provides an exchange forum for all Site tenants to discuss safety issues and lessons learned. Opportunities within EFCOG for benchmarking, mentoring and self-assessments will be explored. A benchmarking trip to a DOE-Complex site will take place in FY15.

Incorporation of Safety Culture Concepts

SRNS incorporates safety culture concepts into most briefings and forums. SRNS will continue to utilize every opportunity to reinforce safety culture concepts through these venues. To further this effort, Consolidated Annual Training (CAT) 2016 will be modified to incorporate safety culture concepts. SRNS will also participate in planned National Training Center safety culture training and will explore opportunities to bring safety culture subject matter expert speakers to SRS.

Lessons Learned

SRNS will continue to monitor lessons learned as shared throughout the complex and incorporate safety culture into site lessons learned communications. A recent example of lessons learned application is the conduct of an extent of condition review of the Safety Culture Judgment of Need (JON) within the WIPP Radiological Release Event Report.

Webpage and Performance Measures

SRNS will consolidate safety culture information on a single webpage. SRNS currently monitors many aspects of safety culture on the company scorecard. Both leading and lagging indicators are tracked, utilizing statistical process control techniques. These performance indicators will be reviewed, modified as necessary, and placed on an individual “Safety Culture” page within the scorecard. Examples of performance measures currently being measured and a prototype layout of the scorecard follow:

SRNS Safety Culture			
	Apr	May	Jun
Organizational Learning			
SRNS Employee Concerns	Yellow	Yellow	Yellow
SRNS Employee Concerns (Safety)	Green	Green	Green
SRNS Self Assessment Quality	Green	Green	Green
SRNS Self Assessment Timeliness	Purple	Purple	Green
SRNS Corrective Action Quality	Green	Purple	Purple
SRNS Corrective Action Timeliness	Green	Purple	Purple
SRNS PMs Deferred	Green	Green	Green
SRNS PMs Delinquent	Purple	Purple	Green
Management Leadership			
Executive Team MFO Performance	Green	Green	Green
MFO Performance	Green	Green	Green
Employee Engagement			
SRNS Corrective Actions	Green	Green	Green
SRNS BBS Observations	Green	Green	Purple
SRNS BBS % Safe Behaviors	Green	Green	Red

Schedule for Tool Development and Implementation

Tool	Implementation Schedule
1. Broaden SCWE Steering Team charter to address sustainability tools	12/31/14
2. Compile results of survey / interviews and communicate results and corrective actions	12/31/14
3. Initiate monthly employee safety culture survey	01/31/15
4. Review the DOE-HQ lines of inquiry regarding safety culture	04/30/15
5. Perform an annual self-assessment of safety culture	07/31/15
6. Complete VPP recertification	10/31/14
7. Conduct an independent review of SRNS safety culture	10/31/16
8. Explore opportunities within EFCOG for benchmarking, mentoring and self-assessments	04/30/15
9. Conduct a benchmarking visit to a DOE-complex site	10/31/15
10. Review and modify employee Consolidated Annual Training (CAT) 2016, incorporating safety culture concepts	07/31/15
11. Participate in National Training Center safety culture training	12/31/15
12. Explore opportunities to bring safety culture subject matter expert speakers to SRS	03/31/15
13. Develop a path forward for incorporating safety culture into site lessons learned communications	03/31/15
14. Consolidate safety culture information on a single webpage	06/30/15
15. Review safety culture performance measures, modify as necessary, and place on an individual "Safety Culture" page within the SRNS Scorecard	12/31/14

These tools and schedule are tracked in the Site Tracking, Analysis & Reporting system (STAR), Ref: 2014-CTS-009907.

As described in this plan, SRNS management involvement and oversight of efforts to sustain and improve our safety culture will continue. SRNS recognizes a positive safety culture is vital to the success of the SRS mission and that its dynamic components require continuous management focus.



Safety Culture Sustainment Plan

Savannah River Remediation

Background

In early 2012, Savannah River Remediation (SRR) identified the need to strengthen its nuclear safety culture (NSC) based on events at other DOE sites. SRR engaged with the Institute of Nuclear Power Operations (INPO) to assist in the conduct of a NSC survey and self-assessment in the summer of 2012. Later in 2012, SRR conducted an internal independent assessment of our NSC which provided additional insights. These became the primary basis for our Safety Conscious Work Environment (SCWE) self-assessment report, which was delivered to DOE-SR in January 2013. The assistance from INPO, the internal independent review and benchmarking at other nuclear sites provided a fresh perspective that aided in establishing our NSC improvement plan and this sustainability plan. For reference, for each of the fourteen completed and planned actions, correlations to the seven standout areas for growth from the DOE Consolidated Report (May 2014) are provided in brackets. Section IV provides a matrix for each of the topics provided in the plan outline.

I. Completed actions to date to foster and improve safety culture

Following the two assessments conducted in 2012, a NSC improvement plan was initiated (2012-CTS-012437) which included numerous actions. Many of those actions are complete and form part of the basis of our safety culture sustainability plan. Key completed improvements are the following:

- Initiated ongoing NSC messaging to reinforce desired attributes - Examples include 1) Instituted the *Safety Culture Monitor*, a periodic newsletter that includes NSC topics. 2) Issued the *SRR Owners' Manual* – an employee booklet of NSC information, Human Performance Improvement tools and other helpful information. 3) Started NSC messaging during key meetings, including monthly employee safety meetings [Demonstrated Safety Leadership (LEADERSHIP); Open Communication and Fostering an Environment Free from Retribution (LEADERSHIP); Personal Commitment to Everyone's Safety (EMPLOYEE ENGAGEMENT)]
- Enhanced company level reporting with the development of a business metric dashboard based on the Balanced Scorecard approach and a NSC specific dashboard [Demonstrated Safety Leadership (LEADERSHIP); Credibility, Trust and Reporting of Errors (ORGANIZATIONAL LEARNING)]
- Implemented improvements in the issues management program (MRP 4.23, Corrective Action Program, Revision 13) and trained/briefed key participants including selected DOE-SR representatives on the expectations and tools [Credibility, Trust and Reporting of Errors

(ORGANIZATIONAL LEARNING); Effective Resolution of Reported Problems (ORGANIZATIONAL LEARNING)]

- Developed a formal process for Management of Change (Manual S4, Procedure ADM.59) [Clear Expectations and Accountability (LEADERSHIP), Effective Resolution of Reported Problems (ORGANIZATIONAL LEARNING)]
- Established tools to support a disciplined approach to Operational Decision Making (Manual S4, Procedure ADM.56) [Open Communication and Fostering an Environment Free from Retribution (LEADERSHIP), Clear Expectations and Accountability (LEADERSHIP), Personal Commitment to Everyone's Safety (EMPLOYEE ENGAGEMENT)]
- Completed review of Accident Investigation Board reports from the two Waste Isolation Pilot Plant events from February 2014 with a strong self-critical view to determine needed prompt actions and strategy to finalize long term actions (STAR 2014-CTS-3256 and SRR-CAA-2014-00208, Contract DE-AC09-09SR22505-Evaluation of Phase I Radiological Release Accident Investigation (AI) Report). [Demonstrated Safety Leadership (LEADERSHIP); Open Communication and Fostering an Environment Free from Retribution (LEADERSHIP); Credibility, Trust and Reporting of Errors (ORGANIZATIONAL LEARNING)]

II. Tools that will be used to sustain and improve safety culture

The value of a strong NSC is recognized at SRR and the management team has committed to invest in actions to grow and sustain the safety culture. Following are specific actions planned toward these goals:

- A. Safety culture monitoring panel - Modify the LW Performance Analysis procedure (Manual 12Q, Procedure PA-1A) to establish a NSC Monitoring Panel to performing quarterly NSC performance reviews as part of the overall quarterly performance analysis process. Input on NSC performance and concerns will be provided to senior management from the NSC lead, the Employee Concerns lead and the Employee Environment Team (EET) lead. The EET is a cross section of employees that meet together and serve as a liaison between senior management and the workforce for important initiatives. Based on this input, the management team may direct actions to address identified weaknesses or opportunities for improvement related to NSC. (Deliverable: Approve and implement procedure by 1/31/15) [Demonstrated Safety Leadership (LEADERSHIP); Open Communication and Fostering an Environment Free from Retribution (LEADERSHIP); Teamwork and Mutual Respect (EMPLOYEE ENGAGEMENT)]
- B. Periodic self-assessment - Conduct a NSC employee survey to assess performance. Results will be an important input for the NSC Monitoring Panel. (Deliverable: Complete survey and document results by 3/31/15) [Credibility, Trust and Reporting of Errors (ORGANIZATIONAL LEARNING)]
- C. Benchmarking - Perform an independent benchmarking review of the contractor assurance program by independent subject matter experts to identify continuous improvement opportunities. (Deliverable: Review report issued by 1/31/15) [Clear Expectations and

Accountability (LEADERSHIP); Effective Resolution of Reported Problems (ORGANIZATIONAL LEARNING)]

- D. Periodic independent reviews - Continue to monitor NSC health during ongoing Integrated Independent Evaluations (IIE) by establishing a schedule to include NSC specific assessment criteria during the IIEs for FY15. These targeted reviews include corporate subject matter experts to promote consideration of proven improvement opportunities. (Deliverable: Issue FY15 Integrated Assessment Plan including IIE schedule by 12/31/14) [Demonstrated Safety Leadership (LEADERSHIP); Credibility, Trust and Reporting of Errors (ORGANIZATIONAL LEARNING); Effective Resolution of Reported Problems (ORGANIZATIONAL LEARNING)]
- E. Continuing training - Complete training planned based on the book, *Speed of Trust*. The training targets the management team in an effort to enhance open communications and foster an environment free from retribution. (Deliverable: Complete all 3 waves of the computer based training for 80% of management team by 6/30/15) [Open Communication and Fostering an Environment Free from Retribution (LEADERSHIP), Teamwork and Mutual Respect (EMPLOYEE ENGAEMENT); Credibility, Trust and Reporting of Errors (ORGANIZATIONAL LEARNING)]
- F. Continuing training - Implement leadership training for first-line managers to enhance teamwork and mutual respect and participation in work planning and control. (Begin training by 4/30/15) [Demonstrated Safety Leadership (LEADERSHIP); Open Communication and Fostering an Environment Free from Retribution (LEADERSHIP); Clear Expectations and Accountability (LEADERSHIP); Teamwork and Mutual Respect (EMPLOYEE ENGAEMENT)]
- G. Lessons learned - Establish a Change Management Plan (CMP) based on lessons learned and corporate guidance to guide further enhancements to the issues management program to promote timely resolution of reported problems and a questioning attitude. (Deliverable: Issue CMP by 1/31/15) [Credibility, Trust and Reporting of Errors (ORGANIZATIONAL LEARNING); Effective Resolution of Reported Problems (ORGANIZATIONAL LEARNING)]
- H. Improve SCWE self-assessment guidance - Volunteer to participate in the planned DOE provided Safety Culture Assessment training based on INPO/USA methodology and DOE attributes. (Deliverable: Attend training if allowed by 2/28/15) [Demonstrated Safety Leadership (LEADERSHIP); Credibility, Trust and Reporting of Errors (ORGANIZATIONAL LEARNING)]

III. Schedule for development and implementation of tools

1) IIE schedule to include NSC specific assessment criteria (D)	12/31/14
2) Modify the LW Performance Analysis procedure (A)	1/31/15
3) Independent review of the contractor assurance program (C)	1/31/15
4) Establish CMP for enhancements to the issues management (G)	1/31/15
5) Volunteer for DOE Safety Culture Assessment training (H)	2/28/15
6) Conduct a NSC employee survey to assess performance (B)	3/31/15
7) Implement leadership training for first-line (F)	4/30/15
8) Complete <i>Speed of Trust</i> training (E)	6/30/15

IV. Matrix Outline

The planned actions are consistent with those recommended by DOE-SR. Linkage between the two lists is provided below:

Examples of tools that can be utilized	Action Link
Safety culture Monitoring Panels	A
Revise/Improve Safety Culture Performance Measures	In place with NSC Dashboard as discussed in text.
Revise/Improve Safety Culture Assessment Guidance	H
Benchmarking	C, H
Evaluation of DOE Orders, Guides and Standards to incorporate Integrated Safety Management, Safety Culture, and SCWE Concepts	C, D, H addresses effectiveness of implementation to requirements
Action Plans in response to self-assessments completed in 2013	Actions are tracked in the NSC Improvement Plan, 2012-CTS-012437
Periodic self-assessments	A, B, H
Periodic independent reviews	C, D, H
Continuing Training	E, F, H
Performance Measures	In place (see Metrics section), A & C may provide recommendations
Lessons Learned	G on improvements in Problem identification, also A, B, C, and D provide lessons learned evaluations. WIPP reviews by SRR noted in 2014-CTS-3256

The issues identified in the SRR SCWE self-assessment report were similar to those identified in the DOE Consolidated Report. For SRR, the most significant finding was the need to improve in the area of problem identification and effective resolution. This was seen as a recurring weakness in the DOE complex. Good progress has been made in this important activity within SRR and additional improvements are being planned. SRR did not identify significant weaknesses in the area of team work and mutual respect and it was found that SRR maintains a Safety Conscious Work Environment (SCWE) and an environment free from fear of retribution. Even so, these critical areas are addressed in the SRR Sustainment Plan. These plans are consistent with the improvement actions planned by DOE –HQ as identified in the DOE Consolidated Report.

The eight planned SRR improvements set a path for continuous improvement in Safety Culture and SCWE. The establishment of the NSC Monitoring Panel is seen as a key objective to recognize any adverse trends early and ensure long-term sustainment. In support of this objective, the performance of another safety culture employee survey will provide critical input for the monitoring panel. Also, implementing management training for the first-line managers will help establish a firm foundation for long-term success in maintaining a strong safety culture.

V. Description of Metrics used to monitor safety culture sustainability

As described above, SRR has established a NSC Dashboard to monitor NSC performance. Metrics currently feeding the NSC Dashboard are the following:

- # of alleged Retaliation Employee Concerns
- Timeliness of Employee Concern Evaluations
- # of Disciplined Operations Events (ORPS Reported)
- Timeliness of ORPS Characterizations
- Integrated Assessment Plan vs. Schedule
- Assessment Quality Evaluation
- Self-Identified vs. Event Response Corrective Actions
- Corrective Action Program Timeliness
- Training Hours in Nuclear Safety (Operations/Maintenance)
- Senior Management Field Observation Performance
- Field Management Observations
- New Issue Actions Identified
- Safety Meeting Attendance
- Behavior Based Safety Observations

The NSC Dashboard will be a key tool used by the NSC Monitoring Panel to assess performance. As such, the panel will become the owner of the metric and may adjust parameters as needed to respond to growth and additional focus areas.



**WSI-Savannah River Site
Safety Culture Sustainability Plan
2014-2015**

Introduction

On August 4, 2014, a Letter from the DOE-SR Contracting Office was received by WSI-SRS transmitting the "Safety Culture Sustainment Plans" from David Huizenga, Acting Secretary for Environmental Management. The Letter directed that WSI-SRS develop and submit to DOE-SR by August 29, 2014, a safety culture sustainment plan, which identified:

- 1) Specific sustainment tools that will be used
- 2) Description of the tools
- 3) Plans and schedules for implementation of the tools.

During 2013, WSI-SRS measured and evaluated the safety culture through a survey and a self-assessment. The survey was conducted in June, 2013, and consisted of seven questions. The survey was sent to all WSI-SRS employees.

The self-assessment was performed on July 15-19, 2013, and was a joint self-assessment between DOE-SR and WSI-SRS. Michael Mikolanis, DOE-SR, was the Team Leader. The self-assessment included 40 interviews, observations of meetings and work processes, and document reviews. The interview selection was random and included employees from all Divisions and all levels of employees. Interviews consisted of 10-12 question subsets for each one-hour interview. An appropriate degree of independence was provided during the self-assessment process by pairing six team members of WSI-SRS with four members of DOE-SR. The assessment team evaluated observed behavior and beliefs related to the Safety Conscious Work Environment (SCWE) and compared them against the expectations of excellence described within Attachment 10 of DOE Guide 450.4-1C, *Integrated Safety Management System Guide*.

Executive Summary of 2013 Survey Results and Self-Assessment

The self-assessment team concluded safety is a high priority for WSI-SRS. The review resulted in the identification of five positive observations, seven negative observations, and two general observations.

The positive observations were:

- 1) Management is viewed as being visible, engaged, and communicating regularly on safety issues and their resolutions. Management displays behaviors where safety issue awareness is demonstrated, continuously evaluated and issues resolved.
- 2) Employees can approach management with safety-related issues without concern for retribution. Employees are encouraged to have open dialogue and debate on issues

related to safety and to raise questions during meetings. Management places a high priority on safety concerns and addresses them fairly through established processes.

- 3) Teamwork and cross-functional communications area institutionalized within the organization and safety discussions/topics are integral to meetings and daily operations.
- 4) Overall, credibility, trust, and reporting of errors are valued in the organization.
- 5) WSI-SRS effectiveness reviews are seen as valuable and serve to ensure corrective actions satisfactorily address reported problems.

The negative observations were:

- 1) In some areas, management could improve their field presence in order to better appreciate the level of detail required to perform specific tasks.
- 2) Employees do not feel encouraged or comfortable raising non-safety issues and concerns to supervisors.
- 3) Employees readily identified multiple methods of employee award recognition; however, there are pockets of Protective Force employees who believe good performance is not consistently recognized.
- 4) Interviews indicate bullying and humiliation exists in various pockets among the administrative staff.
- 5) Employees perceive a degree of favoritism exercised by Management.
- 6) Budget and the need to coordinate with other contractors are perceived significant barriers to timely resolution of reported problems.
- 7) WSI-SRS employees are encouraged to participate in performance improvement processes. However, there is a perception that employee opinions/recommendations are not being considered for implementation.

The two general observations were:

- 1) Safety expectations are well-defined, but other processes for establishing expectations are inconsistent. This may contribute to a perception among non-Protective Force staff that WSI's safety focus is overriding other important areas needing focus (i.e., training, morale, and work performance).
- 2) There is inconsistent dissemination of safety trending data to employees, particularly bargaining unit employees.

The WSI-SRS Senior Management team and the SCWE self-assessment team analyzed the final reports for the survey and the self-assessment, developed corrective actions, assigned responsibilities and completion dates. The corrective actions were submitted to DOE-SR and

entered into the STAR database, which tracks corrective actions. The STAR actions were 2013-CTS-009582, 2013-CTS-009583, and 2013-CTS-009584.

Description of Completed Corrective Actions To Date to Foster and Improve the Safety Culture

- 1) The General Manager addressed all managers in the Operations Staff meeting on 9/18/2013, establishing clear standards and expectations for the Safety Conscious Work Environment. The Managers, using standardized talking points, briefed their supervisors. The Quality Assurance Manager and the Dispute Resolution and Compliance (DRC) Administrator addressed this same topic in annual Supervisor's Training. The last session of Supervisor's training was conducted on 9/23/2013.
- 2) During this same Supervisor's training, two additional topics were *Reward and Recognition* and *Discipline*. Workforce Services Department personnel and the Labor Relations Manager presented these topics. The focus was methods, procedures, and consistency. Since this training, the Quality Assurance Manager, also a member of the SCWE team, reviews the WSI-SRS Discipline Log monthly to ensure that discipline processes are applied consistently and within WSI-SRS procedures, and has worked with both individual managers and with the senior leadership team to address any issues. The QAD Manager also conducts quarterly reviews of Rewards & Recognition data to identify areas of strength and weakness, and communicates these results to the senior leadership.
- 3) An Employee Bulletin was issued communicating the standards and expectations to WSI-SRS employees. The bulletin also addressed and reaffirmed the avenues of recourse available to employees, including:
 - a) Chain of Command
 - b) Open Door Policy
 - c) Employee Concerns Program
 - d) Communications Meetings
- 4) A brochure was printed and sent to all WSI-SRS management. The brochure was based on the HSS publication which was prepared by the National Training Center. The brochure was modified to ensure it was WSI-specific and related to WSI-SRS procedures and policies.
- 5) The Training Division Director and the DRC Supervisor evaluated the Leadership Skills Training for all Leaders. This action is ongoing.
- 6) An employee bulletin was issued reiterating to employees the importance of raising non-safety issues. While WSI-SRS does not control the site budget, we have a Maintenance List that is reviewed with SRNS weekly. The prioritization process for maintenance items was explained in the bulletin.

- 7) Information from Monthly Safety Meetings is sent to Protective Force areas for use during musters, as the safety topic. The material from the Monthly Safety Meeting is reviewed and condensed for the time allotted during musters.

Specific Sustainment Tools

- 1) Action Plans in response to the Self-Assessment completed in 2013
- 2) Management and Executive Walkdown Programs
- 3) Safety Culture Monitoring Committee
- 4) Safety Culture Performance Metrics
- 5) Benchmarking
- 6) Periodic Self Assessments
- 7) Continuing Training

Description of Tools that will be used to Sustain and Improve Safety Culture

- 1) Senior Leadership will continue to emphasize expectations and disseminate information concerning safety trends. This is an ongoing action from the 2013 Self-Assessment.
 - a) The General Manager and the Operational Directors will address annual Supervisors Training during August and September 2014, emphasizing accident/injuries, and conduct of operations.
 - b) During Monthly Safety Meetings, Senior Management will speak on expectation and safety trends. The Occupational Safety and Health Department will continue to publish information through Employee Bulletins, musters, and the Employee Safety and Health Committee.
- 2) Managers and Directors will continue the established Management and Executive Walkdown program. The primary objective of the WSI-SRS Executive/Management Walkdown Program is to promote open communications between employees and management. WSI-SRS Directors and Managers are routinely scheduled to informally tour different WSI-SRS areas outside of their own departments in order to:
 - a) Update employees on significant program/process changes/improvements within the manager's areas of oversight;
 - b) Commend good practices;
 - c) Recognize improvement opportunities; and
 - d) Listen to employees' issues while pursuing proper channels for resolution.
- 3) Charter a Safety Culture Monitoring Committee. This committee will include members of Senior Management, the Dispute Resolution and Concerns (Employee Concerns) Administrator, and members of the SCWE self-assessment team. All have received

training in SCWE. The committee will develop a charter, based on ISMS concepts and practices. The committee would initiate and monitor the organization's use of SCWE tools, and methodologies.

- 4) Develop safety culture performance metrics. Beginning with metrics from the 2013 survey and self-assessment, analyze and select key performance measures to track and trend. Using future surveys and self-assessments, evaluate progress.
- 5) Benchmark other organizations for safety culture best practices.
 - a) The Occupational Safety and Health Department Manager will conduct conference calls with other WSI contracts within the DOE Complex to exchange best practices and lessons learned.
 - b) The Quality Assurance Department will report to the Safety Culture Monitoring Committee on safety culture best practices as they visit various industries through their participation in the Lean Alliance initiative.
 - c) The Safety Culture Monitoring Committee will request information from organizations such as Institute of Nuclear Power Operations (INPO).
- 6) Periodic self-assessments. Evaluate the use of surveys and self-assessments, the frequency, focus, methodology. Evaluate if the annual Integrated Safety Management Self-Assessment could incorporate SCWE questions/interviews.
- 7) Continuing training.
 - a) Senior Management and SCWE Self-Assessment team members have received classroom training.
 - b) In the U.S. Department of Energy, Consolidated Report for Defense Nuclear Facilities Safety Board Recommendation 2011-1, Actions 2-8 and 2-9, states on page 27 that the National Training Center (NTC) will execute training on Safety Culture and SCWE in computer-based training for employees. Once this training is developed and available, WSI-SRS will participate in the training.
 - c) In the interim, new supervisors/managers will receive the SCWE brochure and a briefing on safety culture and SCWE.
 - d) Evaluate the NTC course, SAF-200DE, *Prerequisite to Safety Conscious Work Environment*, as a training resource for managers and supervisors.

Plans and Schedules for Implementation of the Tools

Sustainment Tool	Implementation Schedule
1. Action Plans from 2013 Self-Assessment, Senior Management emphasis during Supervisor's Training	August-September 2014
2. Action Plans from 2013 Self-Assessment, Communication of safety trends	Implemented, ongoing
3. Management and Executive Walkdowns	Implemented, ongoing
4. Safety Culture Monitoring Committee	January 2015
5. Safety Culture Performance Metrics	January 2015
6. Benchmarking	August 2014, ongoing
7. Periodic Self-Assessments	August 2015
8. Continuing Training	Development by NTC

SALT WASTE PROCESSING FACILITY PROJECT

ORGANIZATIONAL CULTURE IMPROVEMENT PLAN

Contract No. DE-AC09-02SR22210

Phase II

Function: Assurance
Doc. No.: PL-AS-1207
Revision: 0
Date: 05/09/2013

SIGNATURE PAGE


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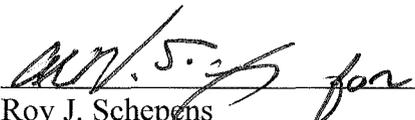
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SUMMARY OF CHANGES

Revision No.	Date	Description of Change
A1	02/22/2013	Per DMR-2467 Issued for Intradiscipline Check
A2	02/25/2013	Per DMR-2467 Issued for Interdiscipline Review
0	05/09/2013	Per DMR-2467 Issued for Approval

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LIST OF ACRONYMS AND ABBREVIATIONS

CR	Condition Report
DOE	U.S. Department of Energy
DNFSB	Defense Nuclear Facilities Safety Board
ECP	Employee Concerns Program
EPC	Engineering, Procurement, and Construction (Contractor)
IOANSC	DOE Independent Oversight Assessment of Nuclear Safety Culture
NRC	U.S. Nuclear Regulatory Commission
PITS	Performance Improvement Tracking System
PS	Policy Statement
SCWE	Safety Conscious Work Environment
SWPF	Salt Waste Processing Facility

1.0 BACKGROUND

The U.S. Department of Energy (DOE) Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2011-1, Safety Culture at the Waste Treatment and Immobilization Plant¹ committed DOE to perform an extent of condition review of safety culture across the complex. The DOE implementation plan was issued in response to whistleblower accusations linked to potential nuclear safety issues at the DOE Waste Treatment Plant, currently under construction at the Hanford Site. Throughout much of fiscal year 2012, the DOE Office of Independent Oversight evaluated the safety culture of its major Engineering, Procurement and Construction projects. The Salt Waste Processing Facility (SWPF) Project was evaluated during the last several weeks of Fiscal Year 2012. The results of the evaluation were documented in the DOE Independent Oversight Assessment of Nuclear Safety Culture at the Salt Waste Processing Facility Project² (IOANSC) report, issued to the Federal Project Director on January 23, 2013.

Safety culture evaluations are commonly performed in response to deteriorating safety performance that is evidenced by accidents or declining injury and illness statistics. In contrast, the SWPF Project is acknowledged to perform well both with respect to nuclear facility safety and construction safety. The *IOANSC*² report notes that:

“Parsons is acknowledged by all parties to have an excellent safety record and continues to focus its attention on behaviors and processes that promote safe performance. Parsons management recognizes the dangers in complacency and is continuously working to avoid the potential mistakes associated with maintaining the status quo.”

The *IOANSC*², however, identified four high-level recommended actions to improve the relationship between the Engineering, Procurement and Construction (EPC) (Contractor) and the DOE. The report also identified “areas needing attention” that stemmed from the perceptions and attitudes of project personnel. These perceptions were organized or binned by nuclear safety cultural attributes (U.S. Nuclear Regulatory Commission [NRC] *Final Safety Culture Policy Statement*³). These attributes include:

1. Leadership Safety Values and Actions,
 2. Problem Identification and Resolution,
 3. Personal Accountability,
 4. Work Processes,
 5. Continuous Learning,
 6. Environment for Raising Concerns,
 7. Effective Safety Communication,
 8. Respectful Work Environment, and
 9. Questioning Attitude.
-

These attributes were developed by the NRC and the regulated communities, including the senior leadership of the nuclear power utilities. DOE has not established these as specific expectations for Federal or contractor organizations; consequently, actions taken pursuant to these criteria are process improvements, not corrective actions. These attributes comprise common sense elements of an ideal organizational culture^A (see Hopkins, A, *Studying Organizational Culture and its Affect on Safety* 2006⁴), and largely pertain to the organizational flow and use of information. The pursuit of these ideal attributes must be made with humility since they pertain to organizational psychology, derived from the cumulative psychology of the organization's leaders, managers and personnel. More specifically, attainment of these attributes on an organizational scale requires humans to change deep-seated patterns of behavior that are driven by unconscious assumptions. For example, it is simple to establish expectations that personnel have a questioning attitude, as the Project does through Policy Statement (PS)-04, *Project Manager's Policy on Conduct of Business*⁵; however, such an attitude derives from each individual's personality-type and life experiences. Auditors (or detectives), for example, must develop a questioning attitude to succeed, but this often takes years to develop through initial mentoring and years of experience.

2.0 APPROACH

Embarking on organizational change presents several challenges for an EPC. It takes years to change the culture of an organization. Case studies are discussed in terms of decade long experiences (e.g., Simon, S. L, and Cistrano, P. A., *Professional Safety, Journal of the American Society of Safety Engineers* [2009]⁶). Not only does change require time, it also requires a relatively stable organization such as a nuclear power station or a commercial airline. SWPF is a Project with a defined beginning and end, characterized more by turnover than organizational stability.

The pursuit of culture change is commonly initiated because of an internal, organic understanding by the leadership that it is necessary for the organization's survival (see Schein, E., *Organizational Culture and Leadership* 2010⁷). Change is commonly orchestrated by outside consultants, trained and experienced in organizational psychology. This is necessary for obvious reasons; however, one of the key reasons outside assistance is needed is to serve as mediators between groups within the organizations that need to build trust. The lack of trust may be vertical or lateral (peer to peer) with respect to the chain of command.

The *IOANSC*² identified perceptions that would tend to work against a robust Safety Conscious Work Environment (SCWE). The *IOANSC*² is analogous to a medical exam that determined body temperature, pulse rate, weight, blood pressure, etc. The results could lead to a number of

^A The term organizational culture is used in lieu of safety culture. As noted by Hopkins, A. (2006), [e]very organization has a culture ... and that culture can be expected to impact safety. Understanding how this happens can provide insights into ways organizational cultures need to be modified to give a higher priority to safety. . ." Organizations with strong and effective internal communications and feedback mechanism, for example, will perform better than those that do not in all areas, including quality, safety, and productivity.

diagnoses without additional information (e.g., a fever can result from chemical exposure, bacterial infection, or viral infection, each of which is corrected with completely different remedies). Causes of the results documented in the *IOANSC*² may be multiple and dissimilar for any given dimension that the evaluation team examined and for the particular organization evaluated. Although it is simple for management to reinforce SCWE, until a better understanding is developed of the underlying causes, such a standard response will be of limited value. SCWE-related survey results show that many personnel (10-80% depending on the organization) either do not trust management or are unsure if they can trust management. When this is the case, it is necessary to use outside organizational psychologists to bridge these pockets of mistrust in an attempt to understand their underlying sources. An outside consultant can better establish a dialogue between the various subgroups to determine the causes of issues identified by the *IOANSC*². The Project currently lacks the resources for outside support with the necessary expertise in organizational psychology. Given this limitation, this plan is an initial best effort, constrained by the current budgetary realities. These are understood to be the first steps in an ongoing process.

3.0 IMPROVEMENT ACTIONS

The Recommendations section of the *IOANSC*² report consists of four interrelated suggested improvement needs that pertain to “the relationship between ... the stakeholders involved in the SWPF Project,” and several Areas in Need of Attention listed in Appendix B of *IOANSC*². The latter consists of anecdotal comments and observations, and statistical results from surveys.

3.1 Improvement Actions for the Major Recommendations

The *IOANSC*² report offered four recommendation as “... initial steps that the Independent Safety Culture Evaluations Team believes are necessary to effectively implement and execute the actions that will result in improved safe and reliable performance:

- The relationship between all of the stakeholders involved in the SWPF Project must be re-evaluated and cooperation needs to be facilitated, perhaps through the use of independent parties.
- As this Project moves toward the commissioning and operational phases, the impact of the damaged relationships must be minimized in the interest of the success and safe operation of the facility.
- In order to ensure that the organizations can be successful, a level of trust and respect must be reestablished.
- Changes in the management and processes related specifically to the SWPF Project may be required.”

As noted in *IOANSC*² “a healthy safety culture is most often found within an aligned organization that has effective processes, and motivated people.” The Integrated Project Team began responding to these recommendations soon after the *IOANSC*² evaluation was completed. Actions completed to date include:

- Development and signing of a Partnering Agreement by each member of the DOE and EPC Senior Managers;
- Senior Managers have taken the 8-hour DOE National Training Center SAF-200, *SCWE Training*, for DOE Federal and contractor senior leaders;
- DOE and EPC line managers have embarked on teamwork enhancements using an outside consultant: Lencioni, P., *The Five Dysfunctions of a Team*[®] 2002⁸; and
- Significant changes in Project Senior leadership.

Actions taken pursuant to these recommendations are tracked in the Project's Performance Improvement Tracking System (PITS). Additional actions may be taken based on further direction from DOE senior management.

3.2 Improvement Actions for the Areas in Need of Attention

Appendix B of *IOANSC*² lists individual perceptions of personnel that were interviewed, observed, and surveyed by the DOE evaluation team. Although there were useful observations that provide insights into the various attitudes of Project personnel, there were several that were difficult to fathom and therefore, to address. For example, Appendix B of *IOANSC*² contains the following area in need of attention:

“Interviewees indicated that Parsons’ lessons learned program was recently replaced with a ‘knowledge management’ program involving the collection, evaluation, and dissemination of success stories. Perceptions around this new program were that it was not as effective as the lessons learned program and that mistakes were not being discussed.”

The perception that the lessons learned program was replaced is inaccurate. Unfortunately, it was apparently held by more than one person. Because management was not involved in the evaluation through periodic feedback, the origins of these sorts of perceptions cannot be adequately addressed. Clearly, there is an issue that needs to be addressed, but there is no way of knowing if the misconception is due to poor or inaccurate communication, lack of training, or an inaccurate translation of issues by the evaluator. The DOE evaluation team was maintaining absolute independence from line management; however, that resulted in some amount of information being lost.

The *IOANSC*² states that these “...insights are intended to stimulate the organizations to reflect on their culture...” and that “developing a massive amount of corrective actions may perpetuate a compliance mentality, which is not conducive to creating and promoting a healthy safety culture thus efforts to assure that there is a traditional corrective action associated with each insight may be counterproductive.” This DOE guidance informs the scope and content of this improvement plan.

The Project's response to the *IOANSC*² is conducted in accordance with the precepts of formal Change Management. Attempting to respond to every aspect of the *IOANSC*² would spread

resources too thin, cause change fatigue, and would likely fail. Such an approach is also contrary to the guidance provided in the *IOANSC*². Therefore, the response will focus on the most important and significant contributors to our organizational culture. The approach must be tempered by an understanding that changing culture commonly requires a significant existential threat to the organization (i.e., change or go out of business) and takes many years, even with a relatively stable workforce. The SWPF is a Project and therefore has a dynamic, changing workforce, with a limited duration, reinforcing the need to pick the most critical elements of the NRC criteria to focus upon.

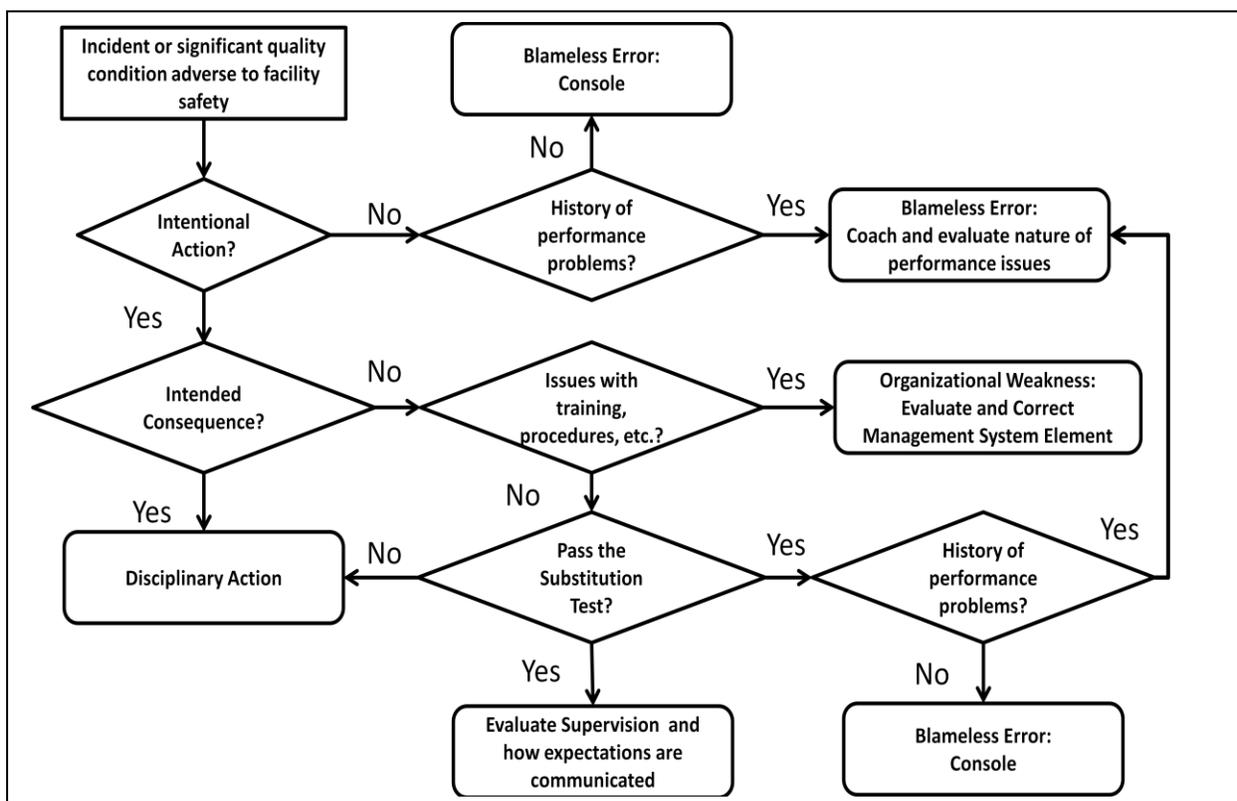
The Safety Culture concept is not synonymous with safety management or safety performance. The safety culture concept grew out of recognition that certified management systems such as the Voluntary Protection Program or the DOE Integrated Safety Management System do not preclude accidents. The concept of safety culture emerged to fill the conceptual gap caused by the recognition that even the best system of policies, plans, procedures, and training are fallible. This reality stems from a gap between how management perceives the efficacy of its system of policies, plans, and procedures and their actual clarity, completeness, and implementability (i.e., how work is imagined versus how work is done). In reality, the employee must often work around or adapt to imperfect procedures to accomplish the process or activity safely.

J. Reason, *Work & Stress - 1998*⁹ noted that “the inherent limitations of safety systems may matter less if organizations can develop robust safety cultures.” The system’s imperfections are mitigated if personnel feel comfortable stopping work to raise issues so that management can fix problems. In other words, management must have an overriding dedication to safety and quality over schedule and cost. Simply telling employees that they may raise issues without fear of reprisals is not enough. There must be trust. No management system process or system of hardware is perfect; however, it will never improve without ongoing feedback and corrective/improvement actions. Organizational learning and improvement require that personnel trust and **communicate** and management listen and **act**. How managers act and communicate when told their system is flawed or when things go wrong, will determine the level of trust between management and personnel. According to J. Reason (1998)⁹ “a safe culture is an informed culture and this, in turn, depends upon creating an effective **reporting culture** that is underpinned by a **just culture** in which the line between acceptable and unacceptable behavior is clearly drawn and understood.”

Just culture requires establishing a balance between how willful violations and unintentional errors are addressed. If personnel are punished for honest mistakes, many of which are driven by management system weakness, then these systems will never improve. A balance can be accomplished through the development of a clearly defined process for distinguishing between honest mistakes and intentional violation. The decision logic behind such processes is commonly referred to as a Culpability Decision Tree (see Figure 3-1). Zero tolerance for willful violations is balanced by the belief among leadership that the vast majority of unintended incidents and mistakes will go unpunished as honest errors. Sidney Dekker, *Just Culture, Balancing Safety and Accountability* (2007)¹⁰, describes a Just Culture as follows:

“A just culture protects people's honest mistakes from being seen as culpable. Responses to incidents and accidents that are seen as unjust can impede safety investigations, promote fear rather than mindfulness in people who do safety-critical work, make organizations more bureaucratic rather than more careful, and cultivate professional secrecy, evasion, and self-protection. A just culture is critical for the creation of a safety culture. Without reporting of failures and problems, without openness and information sharing, a safety culture cannot flourish.”

Figure 3-1. Example of a Culpability Decision Tree



R. Westrum (2004) suggested that the most critical issue for organizational safety is the flow of information. Figure 3-2 provides a cultural development modeled centered on how the organization responds to information, based upon the distribution and nature of authority within the organization. R. Westrum (2004) offers that culture is shaped by the preoccupations of management. These preoccupations and priorities are absorbed by the workforce, who then operate with these priorities in mind. Information will flow, or not. More importantly, issues will be addressed, or not. Because most work involves groups of interacting people and organizations, information provides the necessary cohesion that keeps the overall organization focused and coordinated. If the cohesion is weak, the organization will be weak. A generative culture will make the best use of its assets, a pathological one will not.

Figure 3-2. Cultural Classification (After Westrum, R., *Quality and Safety in Health Care* [2004]¹¹)

PATHOLOGICAL	BUREAUCRATIC	GENERATIVE
Power oriented	Rule oriented	Performance oriented
Messengers shot	Messengers neglected	Messengers trained
Low cooperation	Modest cooperation	High cooperation
Responsibilities shirked	Narrow responsibilities	Risks are shared
Bridging discouraged	Bridging tolerated	Bridging encouraged
Failure leads to blame	Failure leads to justice	Failure leads to inquiry
Novelty is crushed	Novelty is a problem	Novelty is implemented

Without a strong SCWE there is little valuable information flow and without trust between all levels of the organization, there is no SCWE, resulting, at best, in a bureaucratic culture. Trust starts with establishing a process that protects personnel at all levels from disciplinary actions for simple human errors. The improvement plan will therefore focus on the Just Culture and Safety Conscious Work Environment, the two most critical elements for starting on the path towards a robust learning organization and a stronger organizational culture.

It is very difficult to change adult behavior patterns, particularly if one is unaware of how their behavior impacts their peers and subordinates. Similarly, it is difficult to change the beliefs of adults whose individual attitudes may have been influenced by observed behaviors on this and previous assignments. It is possible to alter practices that may in turn begin to alter behaviors and beliefs (J. Reason 1998). If management is aware of inappropriate behaviors, then appropriate measure must be taken to ensure that those exhibiting these behaviors are made aware that they are unacceptable. Establishing a formal mechanism for consistently managing and controlling personnel actions involving errors, incidents and nonconforming conditions should provide a useful starting point. If Project personnel believe they can raise issues without necessarily harming themselves or others, then behaviors and basic assumptions will gradually change. Similarly, if personnel are provided greater access to discrete mechanism for raising issues that are adjudicated by internal independent organizations, combined with ongoing training and encouragement to do so, individual attitudes towards the Project’s SCWE should improve.

3.2.1 Improvement Action 1 - Just Culture

Communication of safety, quality or any information important to the organization can only flow from all levels and across groups if there is trust. Trust is built through years of constructive and

generative interactions. Although the flow of information and organizational interaction has many dimensions, the most critical information for performance improvement derives from errors such as near-miss incidents. If personnel believe their honest mistakes will be used for disciplinary instead of improvement actions, then we can expect to shut off the flow of this important information. To ensure this does not happen, the Project will establish a Disciplinary Review Board that adjudicates potential disciplinary actions associated with accidents, significant near-misses or other self-identifying conditions that posed a significant real or potential threat to safety, health, environment, quality or security, and where the initial recommendation from line management is termination. The Board will not consider actions relative to personnel performance related to such matters as productivity, work quality and punctuality. These matters are managed through each company's performance appraisal processes. Similarly, unethical conduct or illegal conduct will be outside the scope of the Disciplinary Review Board. The following actions will be taken:

1. Project Manager: Select the Disciplinary Review Board members, comprising both line and independent management and staff
2. Assurance Manager: Indoctrinate and familiarize members of the Disciplinary Review Board in general concepts of Just Culture
3. Disciplinary Review Board: Establish charter including Project-specific Culpability Decision Tree process
4. Talent Manager: Develop Project Procedure to establish responsibilities and methods for implementing the Just Culture approach to managing personnel actions.
5. Training Manager with support from Assurance Manager: Unless Project personnel are aware of the board and trust that it will function in accordance with the Culpability Decision Tree, it will be pointless. Provide Project-wide training so that personnel understand the new approach.

3.2.2 Improvement Action 2- Enhanced SCWE Training

SCWE is not a program like radiation protection or quality assurance. It is an attribute of the human environment and its social climate. It exists as the collective response of each individual's perception of the human environment and climate. The Project has several SCWE-related policies, procedures and basic overview training; however, unlike a management program, there is no series of steps and check-offs that make a SCWE. A SCWE is slowly developed through ongoing reinforcement from all of the management and supervisory staff through what they say, and what they do and don't do. The SCWE is made or unmade by how managers, supervisor and peers respond to errors, incidents and concerns. The perception of negative feedback to concerns impedes the development of the SCWE. Negative feedback can be from co-workers and/or supervisors.

Training is not a panacea to fostering a strong SCWE. It is a necessary starting point. The senior management team received 8 hour training, provided by the DOE (SAF-200, SCWE Training). It is important that similar training be provided to the management and supervisory staff. The

general staff (non-craft) will be provided the annual SCWE update training. SCWE will continue to be emphasized with the craft through All Hands Meetings. The latter is important to emphasize since negative feedback from peers can be as detrimental to a SCWE as negative feedback from managers and supervisors.

1. Training and Assurance Managers: Develop management and supervisory level training modeled after SAF-200.
2. Training and or Assurance Manager: Provide in-depth SCWE training to management and supervisors
3. Training and Assurance Managers: Develop worker level training for general employees.
4. Training and Assurance: Conduct training for staff (more limited annual refresher training provided in previous years).

3.2.3 Improvement Action 3 - Enhanced Reporting Mechanisms

It is a simple matter to post a Policy (PS-10, *SWPF Project Manager Policy on Safety Conscious Work Environment*¹²) and provide hands on training. Establishing expectations and providing management and staff with a deeper appreciation of the affects their behavior can have on the SCWE is a necessary first step. Training by itself has limited impact. The *IOANSC* surveys identified areas in need of attention relating to beliefs that:

- Helpful criticism is encouraged,
- Retaliation is unacceptable,
- Individuals are responsible for identifying problems,
- Management can be openly challenged, and that
- Management is open to concerns.

Currently, there are several processes for reporting issues; however, there is very little employee input and for many personnel there are no discrete mechanisms available. For example, the Employee Suggestion is the only practical mechanism available to craft personnel to raise issues outside of their management chain. The Employee Suggestion box is located in the craft tent where everyone can see the person who uses it. Many of these are signed anonymous, suggesting a lack of trust. The Employee Suggestion is approved by the affected line manager and Project Manager.

PITS is the Project's principle issues management process and yet it is virtually unavailable as a discrete reporting tool to many on the Project. PITS provides personnel with a mechanism for raising issues through the Project's Assurance organization. Issues raised through this system are adjudicated through the independent Assurance organization's Issues Coordinator and Enforcement Coordinator, with support from Quality Assurance and the Corrective Action Review Board. Similarly, the Employee Concerns Program (ECP) provides an independent

avenue for raising issues through the Talent Manager; however, there is no simple, discrete means of reporting.

To provide employees with improved access to PITS and the ECP:

1. Assurance or Talent Manager: Place locked drop boxes for PITS/ECP reports at discrete locations in each of the Project facilities.
2. Assurance Manager: Provide cards to all employees that provide specific information on how to report issues through Assurance and PITS, or Talent Management and ECP, providing phone numbers to contact the Talent Manager, Issues Coordinator, and Assurance Manager with any issues or employee concerns
3. Training Manager with support from Assurance and Talent Manager: Provide all employees with annual Reporting Refresher training with an emphasis on locations of drop boxes and available telephone contact number

4.0 IMPROVEMENT ACTION TRACKING AND CLOSURE

The preceding improvement actions are managed according to PP-AS-1203, *Corrective Action Program*¹³. Each of the three improvement actions will be entered into PITS and assigned a responsible manager. Because these are improvement actions they are assigned a Significance Category “T”, signifying that that are included in PITS for tracking purposes.

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