

Building a Strong Culture That Produces Sustainable Performance – 13444

John A. McDonald, Jr

Washington River Protection Solutions LLC, PO Box 850, MSIN R2-53, Richland, WA 99352

John_A_McDonald@rl.gov

ABSTRACT

Washington River Protection Solutions LLC (WRPS) has been involved with culture improvement for a number of years which has included co-chairing the industry effort to develop the EFCOG safety culture guidance documents [1, 2], and integration of this guidance into organizational processes and behavior expectations, described in more detail below. As various organizational cultural assessments have been periodically performed, and subsequent actions implemented to address improvement opportunities, organizational performance has shown improvement. Culture improvement is evident in the company's industrial safety statistics, event rates, safety culture survey results, employee morale, productivity, leadership effectiveness, and employee engagement. There does appear to be a relationship between striving to demonstrate behaviors consistent with excellent safety culture and good organizational performance over the past couple of years at WRPS. As performance continues to be evaluated, an improvement opportunity was identified to further enhance performance through field oriented behavioral/cultural improvement activities. WRPS recently conducted a three month effort to improve consistent implementation of management expectations by increasing management field presence with a focus on interacting real-time with workers and first line supervisors, and changing behaviors as appropriate.

INTRODUCTION

WRPS has been actively involved with culture improvement activities intended to improve organizational performance. The strategy was based on identifying healthy organizational behaviors, communicating and reinforcing behavioral expectations, assessing how well the organization is meeting those expectations, achieving desired results, and continuously improving. This effort to increase management field presence in a focused way to observe and enhance conduct of operations behaviors is viewed as an important culture enhancing activity.

WRPS has been involved with culture improvement for over three years since contract inception. Examples activities include:

- Defining cultural attributes which are consistent with the EFCOG guidance documents [1, 2] and the DOE *Integrated Safety Management System Guide* [3].
- Developing a company level document that describes traits and expectations for trust, communication, commitment, conservatism, management field presence, questioning attitude and raising issues through avenue of choice, problem identification and resolution, self-assessment, accountability, and prevention of retaliation.
- Developing associated expectations which were communicated to all employees.
- Emphasizing the attributes associated with management leadership, employee engagement, and organizational learning.

- Conducting periodic all employee safety culture surveys and assessments with associated improvement actions.
- Performing Safety Conscious Work Environment Self-Assessments based on DOE's ISMS Guidance Document and EFCOG guidance documents [1, 2, and 3].

In 2009, after a year-long effort by DOE and Prime Contractor senior management and subject matter experts, EFCOG issued two guidance documents [1, 2] which described how to assess safety culture and how to improve safety culture. This effort was supported by WRPS and co-chaired by a WRPS employee. This effort included extensive benchmarking of other industries to identify an effective and useful approach to improve safety culture that was fully compatible with DOE's Integrated Safety Management System (ISMS). ISMS applies to the planning and performance of all types of work, including but not limited to construction, operations, maintenance, and decommissioning, as well as design, conceptual studies, environmental analyses, safety analyses, hazard reduction analyses, pollution prevention/waste minimization, and risk analyses. ISMS also applies to all types of hazards, including but not limited to chemical, physical, biological, ergonomic, environmental, nuclear, electrical, and transportation.

There appears to be a direct relationship between striving to demonstrate behaviors consistent with excellent safety culture and good organizational performance over the past couple of years at WRPS. Improvement is evident in the company's industrial safety statistics, event rates, safety culture survey results, employee morale, productivity, leadership effectiveness, and employee engagement.

A strong Contractor Assurance System (CAS), which includes behavior based metrics, has been a valuable process for senior management monitoring and assessing overall performance on a periodic and frequent basis and taking early action to reverse potential adverse trends. Examples of behavioral indicators are problem reports data, peer behavior observations, employee survey results, and management field presence reports which include management feedback. Success is measured by injury rates, event rates, stop works, production goals, and a number of other performance indicators.

One process in particular that demonstrates the health of safety culture is the problem identification/corrective action management system. This process has undergone numerous improvements over time and helps management focus on specific areas and provides for frequent performance monitoring with weekly metrics which includes timely originator contact by management.

DISCUSSION

Analysis of organizational events at WRPS, like many other organizations, revealed that most causes of operational performance problems result from weaknesses in organizational and management related issues. The specific issue that was the inspiration and driving force for the creation of the Field Execution Oversight Team (FEOT) was inconsistent procedure compliance, typically involving low risk work activities. The cause of this inconsistency was believed to be

culturally based. As a result, behavior change was determined to be the appropriate action to address the issue over an extended period of time.

FEOT Purpose

The purpose of the FEOT was to improve Conduct of Operations with respect to the performance of field work and to promote behaviors that support safe and reliable operation. The FEOT placed a select group of 35 management personnel in the field for a period of three months, focusing on individual and leadership behaviors, as well as organizational processes and values. The result of the FEOT was the establishment of documented field observation expectations, and creation of supporting process, documentation, and performance indicators to monitor and adjust ongoing field performance.

FEOT Objectives and Results

Five objectives were identified for the FEOT with results associated with each identified:

1. Observe field work execution and provide coaching/mentoring.
 - More than 200 field observations
 - More than 800 hours of field observation by leadership team members.
 - Observed more than 80 supervisory personnel with feedback provided both during and following the observation
2. Establish consistent expectations/performance throughout the WRPS leadership team through the rotational assignment of managers to the FEOT.
 - All FEOT members participated in field observation activities.
 - FEOT members were briefed on the goals, objectives, and processes to be used during field observation.
 - Consistency was maintained by the setting of expectation via the establishment of a team charter, regular briefings, weekly meetings, and the use of the same field observation checklist.
 - Assurance built into the process that negative observations reaching a certain threshold will result in a problem report.
3. Institutionalize the use of a field observation checklist and improve the consistency/accuracy of Conduct of Operations performance metrics.
 - The field observation checklist was added to the Management Observation Program (MOP).
 - The field observation checklist is now used to develop the work control field execution health performance metric/indicator.
 - An updated set of Conduct of Operations performance indicators are under development as recommended by the FEOT.
4. Provide recommendations to the Conduct of Operations Council based on observations/analysis.

- Eight recommendations were presented for further action to the Conduct of Operations Council based on analysis of the FEOT results.
5. Document/evaluate programmatic improvements provided by the workforce during the review.
- A number of opportunities for improvement were identified by the work force to the FEOT during field observation and feedback sessions.
 - Changes were made to the field observation checklist to improve data gathering and performance indicator development for the future.
 - Changes were made in the conduct of pre-job briefings, and changes to procedures.

The results of the FEOT were identified in an assessment report. During the performance of the assessment, weekly reports were used to capture strengths and issues incrementally and to ensure timely feedback to the management team. Weekly meetings with FEOT members were used to discuss field observations and make the determinations for the items identified as strengths and issues. This process helped to maintain a level of consistency in the process throughout the transition of FEOT members on to and off of the observation team. As findings (non-compliances) were identified, problem reports were issued along with the weekly report.

Since the completion of the FEOT, positive organizational performance trends have continued. An example is the recent achievement of six million hours without a lost work day case, a new safety record for the organization. Additionally, management presence in the field is recognized by the workforce as very positive.

Evaluation of Recommendations

Issues were grouped, resulting in recommendations to be carried forward. Problem reports were written to document procedural non-compliances. Each of these problem reports is being or has been addressed individually, but an additional action was performed as an outcome of this activity to analyze the total set of problem reports generated to determine if additional causal factors and corrective actions need to be taken.

Specific recommendations from the final assessment report are grouped below under four general focus areas.

1. Improve Work Document (Procedure/Work Package) Compliance
 - Initiate work order review and approval checklist reviews.
 - Provide Human Performance Improvement (HPI) training to planners, procedure writers, and field work supervisors.
 - Improve field work supervisor ownership of work documents.
 - Establish a performance indicator to trend work package changes.
 - Establish a performance indicator to trend procedure problems.
 - Standardize selected work documents.
 - Communicate procedure compliance expectations.

- Maintain management field presence.
 - Benchmark procedure processes.
 - Streamline/expedite work package changes.
 - Initiate procedure compliance causal analysis.
2. Improve Work Efficiencies and Delays
 - Initiate a task team to analyze work efficiencies identified and provide recommendations.
 3. Improve Conduct of Operational Performance Indicators and Establish Ownership with the Conduct of Operations Council Field Excellence Captains (FEC)
 - Establish an FEC Sub-Committee to improve the conduct of operations performance indicators.
 - Benchmark key performance indicators.
 - Establish a new set of conduct of operations performance indicators.
 - Establish conduct of operations problem report coding to facilitate data analysis.
 4. Improve Management Observation Program (MOP) Performance
 - Set MOP expectations.
 - Ensure that a problem report is written on MOP observations that identify a noncompliance.
 - Continue to engage with the work force by performing field observations and documenting field presence via the MOP.
 - Update the electronic MOP database to embed the field observation checklist.

Additional Review

A review was completed to evaluate the consistency of the data being gathered by the FEOT and the data gathered by a similar activity performed by the DOE Office of River Protection Facility Representatives.

A review of activity-level work planning and Conduct of Operations was performed. Activities observed included those previously noted by the Defense Nuclear Facilities Safety Board, such as waste transfers, maintenance, and safety basis implementation items.

Corrective Action Plan

A Corrective Action Plan roll-up of the FEOT recommendations and their corresponding corrective actions and assignments was issued for tracking resolution of issues.

CONCLUSIONS

The FEOT made a positive contribution to further improve performance by increasing management field presence focused on behavior change. WRPS feels that the FEOT is a best practice approach to increase management field presence to reinforce expectations, improve behaviors, and ultimately improve culture. Lessons learned were needed to sustain the benefits.

Organizational commitment to management field presence on an ongoing basis, with emphasis on specific behaviors, has had a positive result on sustaining and improving organizational performance at WRPS. Use of EFCOG [1, 2] and DOE [3] documents to effect culture change provides value in the form of improved organizational performance to those organizations putting forth the effort to improve their culture. Actions such as communication of organizational behavioral expectations based on excellence; an effective problem reporting and resolution process; management field presence; a strong CAS, which includes senior management involvement with company level performance indicators and ongoing culture surveys with action plans; an approach can be cultivated that helps produce strong organizational performance.

REFERENCES

1. Assessing Safety Culture in DOE Facilities, Energy Facilities Contractors Group, 01/26/09
2. Activities to Improve Safety Culture in DOE Facilities, Energy Facilities Contractors Group, 01/26/09
3. DOE G 450.4-1C, *Integrated Safety Management System Guide*, Department of Energy, 2011

ACKNOWLEDGEMENTS

None