



Safety Culture Improvement Process Overview

Safety Culture-Contractor
Workshop
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OUTLINE

- Introduction
- Improvement Process Overview
- Benefits of Periodic Assessment and Performance Measurement
- Conclusion

INTRODUCTION

- Safety Culture – The shared values an organization exhibits through its policies, procedures, and actions that makes safety a core value
 - Create a safety atmosphere
 - Employees embrace ownership
 - Accept personal responsibility
- A Safety Culture resides with the overall culture of an organization
- An Organizations Safety Culture can be improved by periodic assessments and adjustments

ISMS Continuous Improvement Thru Improved Safety Culture

Integrated Safety Management System (DOE M 450.4-1)

Guiding Principles

- Line Management Responsible for Safety
- Clear Roles and Responsibilities
- Competence Commensurate with Responsibility
- Balanced Priorities
- Identification of Standards & Requirements
- Hazard Controls Tailored to Work being Performed
- Operational Authorization

Core Functions

- Define Scope of Work
- Analyze the Hazards
- Develop & Implement Hazard Controls
- Perform Work Within Controls
- Provide Feedback & Continuous Improvement

Supplemental Safety Culture Attributes

- Individual Attitude responsible for Safety
- Operational Excellence
- Oversight of Performance Assurance
- Organizational Learning for Performance Improvement

*Reduce gap between
ISM Principles/CF and
safety culture artifacts
observed at site*

SAFETY CULTURE FOCUS AREAS
LEADERSHIP
WORKER INVOLVEMENT
LEARNING ORGANIZATION

*Assess gap between
ISM Principles/CF and
safety culture artifacts
observed at site*

TOOLS TO IMPROVE
VPP, BBS, HRO, HPI, SCWE,
DPO

TOOLS TO ASSESS
Performance Metrics, Leading Indicators,
Interviews, Surveys, Observations
CFA, Assessment Criteria, Workshops

Specific Implementation Guidance



Improvement Process Description

- The light blue box shows the ISM Guiding Principles plus the Supplemental Safety Culture Elements. These principles and their related attributes suitably describe a good safety culture.
- The ISM Core functions are the way we deliver/implement our safety system.
- The gray box shows the three Safety Culture focus areas identified by the team. These are not meant to be a new representation or definition of safety culture, but rather three areas in which to focus attention.



Improvement Process Description

- The green box shows examples of tools for assessing Safety Culture.
- The assessment of Safety Culture is not well established throughout the DOE complex.
- The dark blue box shows examples of tools for implementing various aspects of a good Safety culture.
- These tools are well known throughout the DOE complex, and ample guidance and best practices are available for implementing these tools.

Improvement Process Description

- Completing the description of the Improvement Process, the cycle continues with the idea that:
 - Routine assessment (green box)
 - Followed by corresponding adjustments or corrections to the tools (dark blue box)
 - Should result in closing any gaps between what we observe in the Safety Culture as compared to the ISM Principles and related attributes.

BENEFITS OF PERIODIC ASSESSMENTS/MEASUREMENT

- Provide an indication of where emphasis should be placed for an organization to continuously improve
- Provide a basis for more extensive evaluation of safety program implementation and effectiveness
- “What gets measured gets managed”

CONCLUSION

- As a component of DOE's ISM program, a balanced suite of performance metrics and assessment criteria can assist in the identification of areas needing attention and help measure progress toward becoming a high performing organization with a mature safety culture.

BACKUP MATERIAL

- Potential Set of Performance Indicators and Assessment Criteria Identified by Task Team for Assessing Safety Culture

POTENTIAL SET OF INDICATORS AND ASSESSMENT CRITERIA

- **Potential Set of Performance Indicators and Assessment Criteria Identified by the Task Team for Assessing Safety Culture**
- **Leadership** Focus Area
- - (pm) Number of deferred capital improvements
- - (pm) Number of PM/CM backlog
- - (pm) Average age and number of temporary modifications
- - (pm) Average age and number of instruments out of service
- - (pm) Average overtime hours per person by department
- - (ac) SRB evaluates safety impact of organizational changes
- - (ac) Effectiveness of change is monitored so as not to erode trust nor safety
- - (ac) Management plant walk-through results in safety improvements
- - (ac) Reviews performed by corporate and external industrial & nuclear oversight groups are of appropriate depth and breadth
- - (ac) Personnel/Teams are rewarded for safety behaviors and achievements
- - (ac) Senior management incentive programs reward actions which promote long term plant safety and performance
- **Employee/Worker Engagement** Focus Area
- - (ac) Concerns are documented, tracked and trended in the Condition Report System, and resolved in a timely and effectively manner
- - (ac) DPO process is effectively utilized
- - (pm) Percentage of Alternate Process resolutions that meet timeliness goals
- - (pm) Percentage of personnel who have received initial & refresher SCWE training
- - (ac) SCWE assessments/surveys are conducted regularly
- - (pm) Number of contractor & DOE allegations of chilling effect
- - (ac) Motive is never ascribed to an employee raising an issue
- - (pm) Number and type of concerns raised to Alternate Processes and DOE
- - (pm) Number of Harassment, Intimidation, Retaliation, and Discrimination (HIRD) allegations
- - (pm) Annual number of substantiated HIRD allegations
- - (ac) Effectiveness of corrective actions to HIRD concerns

POTENTIAL SET OF INDICATORS AND ASSESSMENT CRITERIA

- **Organizational Learning** Focus Area
- - (pm) Average age and number of open simulator discrepancies
- - (pm) Number of engineering backlogs
- - (pm) Percentage of important to safety systems that contain temporary modifications
- - (pm) Number unplanned LCO entries
- - (pm) Number of repeat equipment failures in maintenance important to safety systems
- - (pm) Ratio of corrective maintenance versus preventive maintenance
- - (pm) Percentage of risk significant equipment that is assessed periodically (e.g., system health reports)
- - (pm) Percentage of operating experience reports completed on time by department
- - (pm) Percentage of Operational Experience evaluations that result in safety improvements or corrective actions
- - (pm) Number of condition reports written to review systems and procedures against Operational Experience
- - (pm) Number of departmental/cross functional self-assessments performed each year
- - (pm) Number of repeat findings in self-assessments
- - (pm) Percentage of recommendations implemented as result of self-assessments
- - (pm) Number of corrective action program backlog (by significance level) both evaluations and corrective actions
- - (pm) Number and significance of repeat events
- - (pm) Number of good practices and lessons learned identified from benchmarking activities that are internally communicated or selected for further action
- - (pm) Number of work planning deficiencies entered into the CAP
- - (pm) Percentage of pre-job reviews found unacceptable from quality assurance field observations
- - (pm) Percentage of post job reviews which identify good practices and improvements for the job
- - (pm) Number of root causes due to non conservative decision making
- - (pm) Percentage of self identified SCAQs and CAQs versus those that are self-revealing or identified by external organization
- - (pm) Percentage of events that are the result of violations (including administrative violations)

Safety Culture Focus Areas Identified by the Task Team

Leadership

- Clear expectations and accountability
- Management engagement and time in field
- Conservative decision making
- Open communication/raising issues in an environment free from retribution
- Demonstrated safety leadership
- Staff recruitment, selection, retention, & development

Employee/Worker Engagement

- Personal commitment to everyone's safety
- Teamwork and mutual respect
- Participation in work planning and improvement
- Mindful of hazards and controls

Organizational Learning

- Performance monitoring through multiple means
- Use of operational experience
- Trust
- Questioning attitude
- Reporting errors and problems
- Effective resolution of reported problems