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Session Number: W21 Safety Culture Assessments – How is Culture measured?



Safety Culture Assessment – How Can We Tell If We are Succeeding?

Andrew Lawrence
US Department of Energy
Director of the Office of Environmental Stewardship, Public Radiation
Protection, and ES&H Data Analysis

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DOE's Integrated Safety Management Approach

To ensure that the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), systematically integrates safety into management and work practices at all levels, so that missions are accomplished efficiently while protecting the workers, the public, and the environment.

(DOE Order 450.2, *Integrated Safety Management*)

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DOE Safety Culture Definition

“An organization’s values and behaviors, modeled by its leaders, and internalized by its members, which serve to make safe performance of work the overriding priority to protect workers, the public, and the environment.”

DOE Safety Culture Focus Areas:

- Leadership
- Employee/Worker Engagement
- Organizational Learning



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DOE Actions to Improve Safety Culture

- Extent of Condition Reviews
- Self-Assessments
- Sustainment Plans
- Independent Assessments
- Safety Culture Improvement Panel

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Safety Culture Improvement Panel

- Established a permanent, high-level organization devoted to promoting safety culture
- Tasked (among other things) to develop a core set of performance measures to use when measuring safety culture
 - What are the measures that it should consider using?


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Evidence-Based Data Collection for Safety Culture Assessments

* Self-assessments	* Focus groups
* Post-job reviews	* Interviews
* Problem reporting	* Causal Analysis
* Observations	* Benchmarking
* Performance indicators & trending	
* Operating experience	
* Management oversight & involvement	

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Safety Culture vs. Safety Performance




- You need a strong safety culture to have good safety performance
- Can we measure improvements in safety performance that result from efforts to improve safety culture?
- What metrics are:
 - valid?
 - reliable?

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Safety Culture vs. Safety Performance (cont'd)




- If a strong safety culture leads to strong safety performance, what should we expect to see in measures like the following?
 - DART trends
 - TRC trends
 - Occurrence reporting
- Should DOE develop a SC complex-wide dashboard?

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Changing Culture is Hard...




- Avoid the tendency to believe you are making more progress than you are
- Develop reliable internal and independent ways to measure progress
- Bring in the right experts to assist in assessment and change management at the right time

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Factors Affecting Assessment Results



- Contractual drivers—production vs. safety
- Fiscal pressures
- Leadership changes
- Internal pressures/inertia (i.e., resistance to changing the status quo)
 - But it is these reactions to these factors where an organization’s safety culture reveals itself

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Where do we want to go?




- The objective of ISM within DOE is to incorporate safety into management and work practices at all levels...
 - Continuous monitoring of safety culture and safety performance
 - Incorporating best practices
 - Inspiring innovation

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Acronym List



DART Days Away Restricted or Transferred
DOE US Department of Energy
NNSA National Nuclear Security Administration
ISM Integrated Safety Management Systems
TRC Total Recordable Cases

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