“FUNDAMENTALS OF SAFETY CULTURE & CLIMATE”

ENHANCING A CULTURE OF PREVENTION SEMINAR

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What is Organizational Culture?

- The way things get done around here.
- The way people behave when the boss is absent.
- Shared values, attitudes, priorities, beliefs & behaviors among a group of people.
- The community of an organization.
- The product of individual & group values, attitudes, competencies & patterns of behavior that determine the commitment to, & style of, an organization’s H&S management efforts.
Safety Culture

- Safety culture can be defined in terms of what an organization has, or aspects that relate to safety (e.g., norms, policies, procedures, etc.); or, in terms of what an organization is, its common values, beliefs, attributes, behaviors, etc.

- A set of beliefs, values, norms, roles, behaviors, social and technical practices that are concerned with minimizing exposure of employees, customers, contractors, assets, etc.
U.S. Mining Culture

- Audacity
- Independence, self-reliance & autonomy
- Hard working
- Family oriented
- Individualism
- Minimal to modest power distance
- Risk accommodation and/or rationalization
Other Industries

1986
Why Management Systems Fail

January 28, 1986 Cape Canaveral, Florida

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“Finding root cause is not about finding blame or pointing fingers, it is about finding out reasons failures happen so that changes can be made to prevent them from happening again.”

“...investigation focused on the physical causes that lead to the disaster, but also the latent root causes or system failures. These are the decision-making systems that led to the physical root causes.”

Challenger Investigation Report
February 1, 2003 Cape Canaveral, Florida
Why Management Systems Fail

“For both accidents there were moments when management definitions of risk might have been reversed were it not for the many missing signals -- an absence of trend analysis, concerns not voiced, information overlooked or dropped…”

“NASA organizational culture had as much to do with this accident as the foam."

Columbia Investigation Report
BP Texas City Refinery Explosion March 2005

- March 2005
- Over-pressurization of process equip.
- 15 killed, 170 injured.
- Major OSHA & criminal charges.
- $1.5 B loss for BP shareholders.
“...the Panel believes that the lack of effective leadership is systemic, touching all levels of BP’s corporate management having responsibility for BP’s U.S. refineries...”

“Absent a healthy safety culture, even the best safety management systems will be largely ineffective...”

“BP’s corporate organization has mandated numerous initiatives to its businesses...provided little guidance on how to prioritize these many initiatives...do not receive additional funding...senior managers used phrases such as ‘initiative overload,’ ‘incoming,’ and ‘unfunded mandates’ to describe...an avalanche of programs and endeavors that compete for funding and attention.”
2010 Deepwater Horizon

- April 2010.
- 11 killed, 17 inured.
- Failure to follow system.
- Total loses: est $35B.
- Shareholder value lost: $100B.
“The immediate causes of the Macondo well blowout can be traced to a series of identifiable mistakes made by BP, Halliburton, and Transocean that reveal such systematic failures in risk management that they place in doubt the safety culture of the entire industry.”

“It is notable that the Commission places such weight on the culture of the organizations involved…we suspect the Commission is right in its assessment of the culture, because in every organization, culture determines actions and actions determine results.”
Framework For Safety Excellence

Every company has different requirements relative to the emphasis placed on each of the elements.

It is the integration and active management of the three elements that produces safety and health excellence.
Climate Versus Culture

Organizational culture

Cross sectional measure of organizational culture based on employee’s perceptions of different elements of the culture.
Safety Culture Attributes/Characteristics

- **Trust**: mutual recognition of integrity between different levels of an organization.

- Ability to **report**: incidents & near miss events that could affect H&S performance.

- Ability to be **just**: common understanding of what is right & wrong; clear & appropriate rules & procedures, fair & equitable discipline.

- Ability to **learn**: conduct analysis on all relevant incidents, even near misses, and apply the lessons; manage knowledge so that it doesn’t need to be relearned.

- Ability to be **operations-oriented**: Know what is going on at all times; have individual and team situational awareness; know how one operational variable affects another.
Safety Culture Attributes/Characteristics

- **Ability to be mindful**: constantly aware of hazards and risks and are thinking about what might go wrong (the likely and the unexpected). People can deal with the unexpected (don’t just rely on what worked last time).
- **Ability to be constantly wary**: They are uncomfortable when things are going too well, e.g., months or years without incidents increase wariness.
- **Deference to expertise**: management defers to those with expertise regardless of where they are in the organizational structure.
- **Resilience**: don’t let short-term setbacks affect their focus on the long-term goal and the organization necessary to achieve it.
- **Accountability**: all employees know they will be held accountable for their actions and decisions as they relate to work safely or enabling/preventing others from doing so.
Highly Reliable Organizations (HRO)

- Found in organizations with high risk operations but consistently strong and positive performance:
  - Nuclear power plants;
  - Explosives manufacturing plants;
  - Aircraft carrier flight decks.

- Consistent organizational characteristics:
  - Preoccupation with failure (look for early warning signs);
  - Reluctance to simplify interpretations (data complexity);
  - Sensitivity to operations (know what is going on, project to future);
  - Commitment to resilience (learn, grow, preserve function);
  - Deference to expertise (sr mgrs listen to jr techs/engineers).

“Mindful for the expected and unexpected”
The Important Question

- Are safe companies safe because their cultures have attributes associated with justice, learning, reporting, etc. as a result of being safe, or can any company become safer by developing these attributes in their own culture?

- Are cultural attributes dependent or independent variables?
The Critical Questions

- How does a company enhance its own cultural attributes or develop new attributes?
- Can mine operators successfully engage in ‘strategic cultural management’?
Culture Enhancement Elements

1. Define desired & current culture characteristics.
2. Conduct baseline culture/climate assessment:
3. Develop attribute intervention(s).
4. Integrate with leadership development processes.
5. Integrate into performance management & succession planning.
Culture Enhancement Elements

1. Define desired/current culture characteristics:
   - What are your organization’s current characteristics?
   - What characteristics do you want to develop?
   - What is the relationship between safety culture & values?
   - Multiple validated models to reference:
2. Conduct baseline assessment:
   - survey, observations, interviews, etc.

Confidential perception survey:
   - Validated questions?
   - Likert scale versus true/false?
   - One-time or repeat process?
   - Random or selective participation?
   - Voluntary or mandatory?
   - Statistically significant population?
   - Differentiate management & hourly?
   - How to secure confidentiality?

Observations:
   - Reproducible behaviors?
   - Compliance with policy?
   - Trends & patterns?

Follow-up interviews:
   - Cross-sectional?
   - Confidentiality?
   - 1-on-1 or groups?
   - Understand motivation
   - Clarify assumptions

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Culture Enhancement Elements

3. Develop culture attribute intervention(s):
   - Consistent communication (ABC);
   - Actively improve trust & credibility;
   - Implement a behavior observation & feedback process
   - Improve near miss incident reporting;
   - Utilize structured accountability;
   - Fair & equitable discipline;
   - Train for situational awareness (mindfulness);
   - Empower employees to make decisions & solve problems;
   - Foster co-dependency;
   - Etc, etc.
Culture Enhancement Elements

4. **Integrate with leadership development processes:**
   - How do cultural attributes link to leadership competencies?
   - Does your organization have defined leadership competencies?
   - How do you develop/improve these competencies?
   - Determine organization’s 1° management /leadership style:

   **Transactional:**
   - Command & control?
   - Laissez faire?
   - Participative?

   **Transformational:**
   - Inspiring?
   - Influencing?
   - Challenging?
   - Engaging?
Culture Enhancement Elements

5. Integrate into performance management & succession planning:
   • Performance management includes safety leadership?
   • Compensation linked to leadership improvement?
   • Succession planning includes safety leadership review?
   • Promotion to sr line management include time in safety?
Reliable, meaningful change takes months and years depending on the size of the organization, the degree of change needed and willingness of senior management to own the change process.

How do you know how much progress is being made? Ask your employees: repeat the confidential perception survey.

Kiel Centre Model
Leadership Drives Culture

- Justice
- Learning
- Reporting
- Mindfulness
- Wariness
- Preoccupation
- Deferece to expertise
- Resilience

Company culture

Leadership practices

Leadership style

Personal ethics

- Integrity
- Empathy
- Personal motivation

- Vision
- Accountability
- Credibility
- Action oriented
- Communication
- Collaboration
- Feedback
- Recognition

- Inspiring
- Influencing
- Challenging
- Engaging

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‘Strategic culture management’ is multidisciplinary.
Who is best positioned to engage senior management?
What is the role of the S&H professional?
Is there a set of organizational safety culture characteristics that are typical of safe mining companies?
Thank You for Your Attention

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