



Pipeline Safety Management Systems

Pipeline and Hazardous Materials Safety Administration, DOT

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Guiding Principles of Pipeline Safety



- **Our goal is zero incidents** - a perfect record of safety and reliability for the national pipeline system. *We will work every day toward this goal.*
- **We are committed to safety culture** as a critical dimension to continuously improve our industry's performance.
- **We will be relentless in our pursuit of improving** by learning from the past and anticipating the future.
- **We are committed to applying integrity management principles on a system-wide basis.**
- **We will engage our stakeholders** - from the local community to the national level - so they understand and can participate in reducing risk.



One of the INGAA Commitments



- **Foster a Culture of Continuous Improvement:** INGAA members commit to raise the standard for use of management systems across the gas transmission industry to ensure better control of pipeline integrity and system reliability and provide guidance in practices and indicators to be used.

Why Focus on Management Systems?



- Improving safety is a journey, not a project
- Industries where low probability/high consequence events are unacceptable have adopted safety management systems
- Aviation, nuclear, chemical, petroleum refining, medical, and food production
- Public demanded significant reduction in failures or incidents
- Industries made the choice, or it was made for them, to adopt a management systems approach
- Recognized that it is impractical to envision and develop procedures for all possible adverse events

“A framework of processes and procedures used to ensure that an organization can fulfill all tasks required to achieve its objectives”

Meeting The Commitment



- INGAA Foundation – Hands-On Workshop – Late Summer 2015
- INGAA has conducted a baseline assessment of its members' safety culture and has plans to update the survey every few years in an attempt to assess and gauge areas for improvement
- The INGAA Foundation routinely holds safety culture workshops; the last in April 2015, focused on top executives' role in a company's safety culture

Pipeline Safety Management Systems and Safety Culture



- PSMS requires: that all layers of management build systems that require acting with intentionality
 - § Involvement of all layers of Leaders and Management Systems
 - § Scheduled actions escalating through the management chain
 - § Regular Disciplined Corporate Review of Results
- Safety as core value becomes unifying force to improve safety performance
- Execution of elements depends on actions of every individual and organizational unit at all levels.
- Each element can contribute to different aspects of safety culture, and combined they reflect strength of culture.
- PSMS elements and culture continuously support each other yielding increasingly mature system, culture and organization as a whole.

Top Management's Role in Creating A High Performance Safety Culture



What the leader does differently



Climate



Follower Behaviors Change



Attitudes and Beliefs Affected



Culture Created

Blueprint for a Safety Culture



SOURCE: Jim Spiegner, BST Solutions

INGAA's Commitment to Pipeline Safety Management Systems



"Widespread use of management systems was an essential element of INGAA's Integrity Management Continuous Improvement effort on pipeline safety, launched in 2011. INGAA is eager to see API Recommended Practice 1173, Pipeline Safety Management Systems, when it is rolled out in the coming weeks. We hope widespread adoption of this RP can help our members continuously improve and ultimately achieve our goal of zero pipeline incidents."