Presentation of API RP 1173: Development Process, Essential Elements and Key Concepts

August 25-26, 2015 -   PHMSA TAC Meeting, Washington, DC

Ron McClain – Kinder Morgan – RP Committee Chair

API RP 1173 Update

- **The new ANSI/API Recommended Practice 1173 is reality. First Edition, July 2015**

- **It results from over two years of committee work and stakeholder engagement.**

- **PHMSA hosted three workshops with heavy attendance during development and publication.**

- **There were 13 revisions within the committee work and 1400 comments were resolved through two balloting efforts.**

- **There was unanimous approval at the second ballot**

- **NTSB Concurred the RP satisfied their recommendations to API**

- **The published RP has the potential to impact pipeline safety more than other standards because it sets overarching management processes**

Pipeline Safety Management Systems

ANSI/API RECOMMENDED PRACTICE 1173
FIRST EDITION, JULY 2015

NTSB Recommendations to API

- **Implementation of SMSs in transportation systems by elevating SMSs to its Most Wanted List.**

- **SMSs continuously identify, address, and monitor threats to the safety of company operations by doing the following:**

  - Proactively address safety issues before they become incidents/accidents.

  - Document safety procedures and requiring strict adherence to the procedures by safety personnel.

  - Treat operator errors as system deficiencies and not as reasons to punish and intimidate operators.

  - Require senior company management to commit to operational safety.

  - Identify personnel responsible for safety initiatives and oversight.

  - Implement a nonpunitive method for employees to report safety hazards.

  - Continuously identify and address risks in all safety-critical aspects of operations.

  - Provide safety assurance by regularly evaluating (or auditing) operations to identify and address risks.

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The Prize is Improved Safety

- **Pipeline safety stakeholders led by the American Petroleum Institute (API) developed a comprehensive framework of recommended practices for pipeline safety and integrity procedures across the United States.**

- **Result: New API Recommended Practice 1173 – Pipeline Safety Management System specific to pipeline operators across the United States**

- **Key components of RP 1173:**

  - **How top management develops processes to reveal and mitigate safety threats**

  - **Provide for continuous improvement**

  - **Make compliance and risk reduction routine through intentional actions by top management, management and employees**

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SMS Development Committee Members

- **Ron McClain, Kinder Morgan , Chair**
- **Mark Hereth, P-PIC, Content Editor**
- **Scott Collier, Buckeye Partners**
- **Tom Jensen , Explorer Pipeline**
- **Paul Eberth, Enbridge Pipelines**
- **Mark Weesner, Exxon Mobil**
- **Brianne Metzger-Doran, Spectra Energy**
- **Tracey Scott, Alliance Pipeline**
- **William Moody, Southwest Gas**
- **Nick Stavropoulos, Pacific Gas and Electric**
- **Steve Prue, Small Gas Distribution**
- **Bill Hoyle, Public – Subject Matter Expert**
- **Stacey Gerard, Public – Subject Matter Expert**

- **Jeff Wiese, PHMSA**
- **Linda Daugherty, PHMSA**
- **Edmund Baniak, API**
- **Robert Miller, AZ Corporation Commission**
- **Massoud Tahamtani, VA State Corporation Commission**
- **Bob Beaton, NTSB (Ex Officio)**
- **John Erickson, APGA**
- **Kate Miller, AGA**
- **Scott Currier, INGAA**
- **Peter Lidiak, API**
- **John Stoody, AOPL**

Essential Safety Management Systems Elements

- **Leadership and Management Commitment**
- **Stakeholder Engagement**
- **Risk Management**
- **Operational Controls**
- **Incident Investigation, Evaluation, and Lessons Learned**
- **Safety Assurance**
- **Management Review and Continuous Improvement**
- **Emergency Preparedness and Response**
- **Competence, Awareness, and Training**
- **Documentation and Record Keeping**

Plan, Do, Check, and Act - PDCA

- **While not a required model, the PDCA is one way to pursue continuous improvement**

- **Management and Leadership are at the center of this effort, casting vision and adding energy to sustain implementation.**
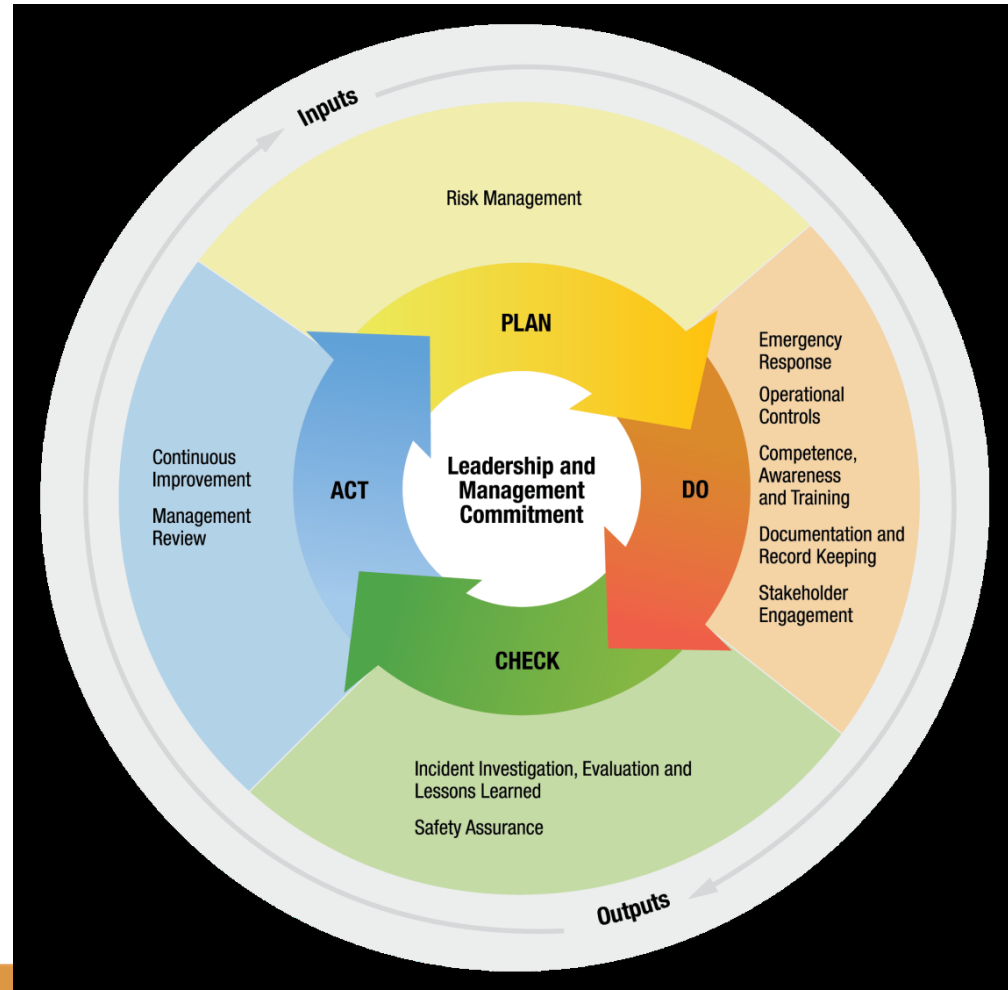
Continuous Improvement and System Maturity

- Think about PSMS implementation as a journey, not a destination.

- Operators will never be 'finished' with SMS implementation as continuous improvement will reveal new possibilities.

- While operators should seek to gain conformance to the standard with a sense of urgency, timeframes to reach significant and widespread maturity across all elements are measured in years. As a PSMS matures, it is subject to assessment and continuous improvement.

What is next?

- **The committee's intent was to provide a framework, scalable for**
  - **Large and Small Operators**
  - **Operators with highly evolved management systems or those starting from scratch**
  - **Implementation might consist of:**
    1. **Reading the practice several times to gain the overall intent**
    2. **Listing your perception of explicit requirements**
    3. **Gathering your existing procedures and processes, including your MS if you've already started**
    4. **Identification of gaps and prioritized steps to close the gap**
    5. **Repeat . . . PDCA – Watch for assured results**

- **Industry Trade Associations will assist pipeline operators with implementation and assist PHMSA with measurement of RP acceptance.**
- **Natural Gas, Oil and Distribution operators will report on their industry efforts to promote implementation**

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