PIPELINE SAFETY MANAGEMENT SYSTEM (SMS)



WELCOME

- Safety Moment
- API Antitrust Statement

WORKSHOP OBJECTIVES-MAKING IT REAL

- Understand SMS tools
- Learn from others SMS experience
- Learn from other industry segments
- Share your experience

OVERVIEW-MAKING IT REAL

- Implementation team progress and tools
- A pipeline safety management system-is and is not
- Maturity model
- Workshop structure



PIPELINE INDUSTRY IMPLEMENTATION TEAM

GUIDING PRINCIPLES

Implementation team's governance for goals & objectives

- One Industry, One Goal
- Improve overall performance (not just safety)
- It's a journey, not a destination
- 4 Flexible and scalable
- Provide tools to assist all operators
- 6 First conformance, then effectiveness
- Voluntary implementation equals unlimited results
- 8 Proactive versus reactive
- 9 Stay true to SMS API RP 1173 (especially terminology)



INDUSTRY IMPLEMENTATION TEAM

ONE INDUSTRY, ONE TEAM

- Industry Associations
 - API
 - AOPL
 - INGAA
 - AGA
 - APGA (American Public Gas Association)
 - CEPA (Canadian Energy Pipeline Association)

Tools & Communications

WEBSITE

www.pipelinesms.org

Revamped in 2018 to improve functionality

BOOKLETS







- ✓ SMS Maturity Model
- ✓ Planning and Implementation gap assessments

Tools

- ✓ Evaluation *effectiveness* assessment
- ✓ Peer-to-peer sharing practices
- ✓ Voluntary API third-party assessment program

WORKSHOPS &

- ✓ *Workshops:* Five held in 2107 & 2018, averaged 100 participants
- **WEBINARS**
- ✓ *Webinars:* Seven held in 2107 & 2018, averaged 80 participants





WHAT IS A PIPELINE SAFETY MANAGEMENT SYSTEM (SMS)?

- A Pipeline Safety Management system is simply a structured method to connect multiple complex activities in a way that:
 - Reveals and manages risk,
 - Promotes a learning environment, and
 - Continuously improves pipeline safety and integrity
- Regardless of where you are on the maturity model, you already have a
 pipeline safety management system.



WHAT PIPELINE SMS IS NOT

- A regulatory requirement it is NOT incorporated by reference into pipeline safety regulations
- A one size fits all approach
- A one-and-done or check-the-box type of activity
- A quick fix approach to pipeline safety



Pipeline SMS Maturity Model and Tools

Pipeline SMS www.pipelinesms.org **LEVEL 1**

PLANNING

Are you starting?

- Organization is developing an understanding of the management system
- Implementation action plan developed
- Implementation action plan approved

LEVEL 2

DEVELOPING

Are you developing it?

- · Processes are being developed
- · Implementation is about 50% complete

LEVEL 3

IMPLEMENTED

Did you develop it?

- Processes are developed
- Processes are documented
- · Processes are in use

LEVEL 4

SUSTAINING

Do you do it?

- · There is evidence of processes being used consistently
- Performance is being assessed

LEVEL 5

IMPROVING

Is it helping?

- · There is evidence of continual improvement
- · Processes are resulting in measurable performance improvements



CONFORMANCE

EFFECTIVENESS



WHERE DO I START?

Pipeline SMS Tool Roadmap

START

GETTING STARTED

- Understand RP 1173
- Obtain management buy inCommit to RP 1173 implementation
- Liquid operators
- see www.pipelinesms.org
- · Gas operators see
- AGA members:
 Commitment to Enhancing Safety
- INGAA members:
- Commitment to Pipeline Safety

PLANNING TOOL

- Summary of API RP 1173 requirements (71 questions)
- A gap analysis tool to compare an operator's existing system to the requirements of API RP 1173
- Documents action plans and responsibilities to close gaps
- Helps operators achieve Level 1 maturity (develop a plan, and begin work)

IMPLEMENTATION TOOL

- Summary of API RP 1173 requirements (71 questions)
- Evaluates and summarizes the operator's implementation status by question, element and overall
- Helps operators track development of programs to implement the RP

CONFORMANCE TOOL

- Comprehensive API RP 1173 requirements (all 234 shall statements from the RP)
- Evaluates and summarizes the Operator's conformance to API RP 1173 by shall statement, element and overall
- Helps operators ensure conformance with all shall statements in the RP
- Tool spans Levels 2-4 as conformance requires processes are in place and effective

VOLUNTARY API THIRD- PARTY AUDIT PROGRAM

- API-administered audit program for conformance to API RP 1173
- Yields an objective evaluation and score
- Appropriate at Level 3 maturity or beyond as effectiveness will be considered

EFFECTIVENESS TOOL

- Helps operators evaluate the effectiveness of their programs in achieving the objectives of the RP (Is it helping?)
- Appropriate at Level 3 maturity or beyond as Effectiveness can be measured once the Pipeline SMS is in place



PEER-TO-PEER SHARING CAN BE CONDUCTED AT ANYTIME



Pipeline SMS

For more information on Pipeline SMS tools or questions regarding Pipeline SMS, please see www.pipelinesms.org or contact API at PipelineSMS@api.org



TOOLS IN SUMMARY

PLANNING TOOL	MATURITY MODEL	IMPLEMENTATION TOOL	CONFORMANCE CHECKLIST	EVALUATION TOOL
A gap analysis tool to compare an Operator's existing system to the requirements of API RP 1173	Measures the degree to which the Pipeline SMS is comprehensive, systematic, and integrated throughout an organization	Evaluates and summarizes the operator's implementation status by question, element and overall	API RP 1173	Helps operators evaluate the effectiveness of their programs in achieving the objectives of API RP 1173
February 2016	November 2017	February 2018	February 2018	September 2018
	<i>Webinar:</i> January 2018	Webinar: February 2018		<i>Webinar:</i> June 2018



WORKSHOP OBJECTIVES-MAKING IT REAL

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WORKSHOP STRUCTURE

- Rotating breakout sessions morning
- Lunch
- Rotating breakout sessions afternoon
- Review and closing comments

CLOSING

- Identify key takeaways
- Network, network, network
- High level of engagement
- Contacts for future help
- More questions than answers

