Pipeline Safety Management Working Group

May 2016 Administrator directed

PHMSA to establish a

SMS Working Group

Objective: Identify and define a key set of

performance metrics to

measure progress of SMS

implementation.

Working Group Members

Primary Members

Richard Kuperwicz Public

Cheryl Campbell Gas Distribution

Andy Drake Gas Transmission

Ron McClain Liquid

Massoud Tahamtani Government

<u>SMEs</u>

Shawn Lyon Liquid

Jemmie Wang Public

Bruce Brabec Public

Brianna Metzger Gas

PHMSA

Linda Daugherty

Bill Rush

Industry Survey

- Designed a simple 8 question survey
- Conducted by all Trade Associations

PIPELINE SMS IMPLEMENTATION TEAM

INDUSTRY SMS IMPLEMENTATION UPDATE

DECEMBER 13, 2017 • WASHINGTON, D.C.

SHAWN LYON, VICE PRESIDENT OPERATIONS • MARATHON PIPE LINE LLC













INDUSTRY IMPLEMENTATION TEAM

ONE INDUSTRY, ONE TEAM

- Started in May 2015
- 24 members operators and associations
 - API
 - AOPL
 - INGAA
 - AGA
 - APGA (American Public Gas Association)

- Actively meeting several times per year
- Focus
 - Strategic
 - Tactical
 - Helping the industry with the how
 - Measuring progress



INDUSTRY IMPLEMENTATION TEAM

GUIDING PRINCIPLES

Implementation team's governance for goals & objectives

- It's a journey, not a destination
- Plexible and scalable
- Stay true to RP 1173 (especially terminology)
- Designed for the pipeline industry
- 5 Improving overall performance, not just safety
- Oivided into conformance and effectiveness
- Voluntary versus regulatory
- 8 Proactive look for weak signals



INDUSTRY PROGRESS

Phase 1	Phase 2	Phase 3
Commitment		
	Tools & Workshops	
		DEMONSTRATING PROGRESS
2015	2016	2017+
 Aggregate industry progress Conformance, then effectivene Industry Maturity Model 		ce, then effectiveness



INDUSTRY HELPING INDUSTRY IMPLEMENT

- Commitment
- Booklets
- Tools
 - Planning (gap analysis) complete
 - Implementation (summary) 1Q18
 - Conformance (shalls) 1Q18
 - Effectiveness (is it helping) 1018
- Workshops
- Mentoring
- Website: www.pipelinesms.org
- Webinars
- Maturity Model





PIPELINE SMS MATURITY MODEL

LEVEL 1

LEARNING

Did you learn?

- Management system required element is not in place
- Organization is in the process of developing and understanding the management system

LEVEL 2

DEVELOPED

Did you develop it?

- Process is developed
- Implementation is not complete

LEVEL 3

IMPLEMENTED

Did you begin?

- Process is developed
- Process is documented
- Process is in use

LEVEL 4

ESTABLISHED

Did you do it?

- There is evidence the process is being used consistently
- Attempts are made to assess performance

LEVEL 5

IMPROVING

Is it helping?

- There is evidence of continual improvement
- The process is resulting in measurable performance improvements



CONFORMANCE

---- EFFECTIVENESS



WHERE DO I START?

Pipeline SMS Tool Roadmap

START

GETTING STARTED

- Understand RP 1173
- Obtain management buy in
- · Commit 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



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



BENCHMARKING

2016 PHMSA LPAC/GPAC SURVEY DATA (LIQUIDS AND GAS)



NEXT STEPS

ONE INDUSTRY, ONE TEAM

- Continue *One Industry, One Team*
- 2018 Webinar series
 - Maturity Model
 - O Tools
- 2018 Workshop
 - Tools how-to session
- API voluntary third-party audit program (pilot 2018)
- Develop metrics
 - Conformance for implementation
 - Effectiveness through meaningful metrics



QUESTIONS AND ANSWERS

It's a journey, not a destination