

PIPELINE SMS INDUSTRY TEAM

PIPELINE SMS WEBINAR BEGINNERS ON THE JOURNEY

MAY 21ST, 2019



BEGINNERS ON THE JOURNEY

- Greeting and API Antitrust Statement
- Why Pipeline SMS — Value & Benefits
- What is Pipeline SMS
 - Examples and experiences
- Getting started
 - Industry Resources and Tools to help start the journey
- Pipeline SMS Industry Team happenings
- Group discussion

TODAY'S SPEAKERS

- David Murk, API Pipeline Manager
- Jeff McGill, Energy Transfer Partners, Director PSMS
- Cindy Graham, Enbridge Inc., Director-Safety & Reliability Governance
- David Hoffman, Enbridge Inc., Manager-Integrated Management-Liquids Pipelines
- Bill Byrd, RCP, President
- Jim Crowley, Manager — Gas, Meter & Corporate Safety, Easton Utilities

API ANTITRUST GUIDELINES

- No discussion or forecasting of prices for goods or services by or received by a company.
- No sharing or discussing any company's confidential or proprietary information.
- No discussion of any company's specific purchasing plans; merger/divestment plans, production information, inventories or costs.
- No sharing or discussion of specific company compliance costs, unless publicly available.
- No agreement or discussion regarding the purchase or sale of goods or services (such decisions are independent company decisions).
- No discussion on how individual companies intend to respond to potential market/economic scenarios or government action: discussion limited to generalities.
- No disparaging remarks regarding specific vendors, products or services.

OBJECTIVES

Provide information on the value of PSMS, the basic concepts around PSMS and the tools and resources that are available to help Operators begin implementation

COMMITMENT TO PIPELINE SAFETY

- Pipeline systems have excellent safety records overall
- Incidents, while low probability, can and do happen
- A single incident can have a large impact
- A pipeline incident on any of our systems can impact every operator in the country
- Ultimate goal is zero incidents

COMPLEX SYSTEMS NEED BETTER APPROACH

- Complex systems fail in unpredictable ways
- Regulatory requirements can't think of every scenario in every system
- Avoiding low probability, unpredictable incidents requires more effort
 - Need broad scope to identify gaps
 - Systematic approach closes gaps
 - Mechanisms for improvement help find and fix the unknown
- Goal of zero incidents provides target, but need mechanism to get there

SMS DELIVERS BENEFITS

- Understand and manage safety efforts
- Continuously improve their pipeline safety performance
- Learn from experience
- Gain efficiencies while improving safety

How SMS HELPS

- Systematic approach to managing safety
- Includes what an organization uses to direct and control its activities
- Offers a structured framework for much of what already doing
- Basic elements are applicable to any size operator
- SMS are intentionally flexible and scalable
- Provides mechanism to continuously improve

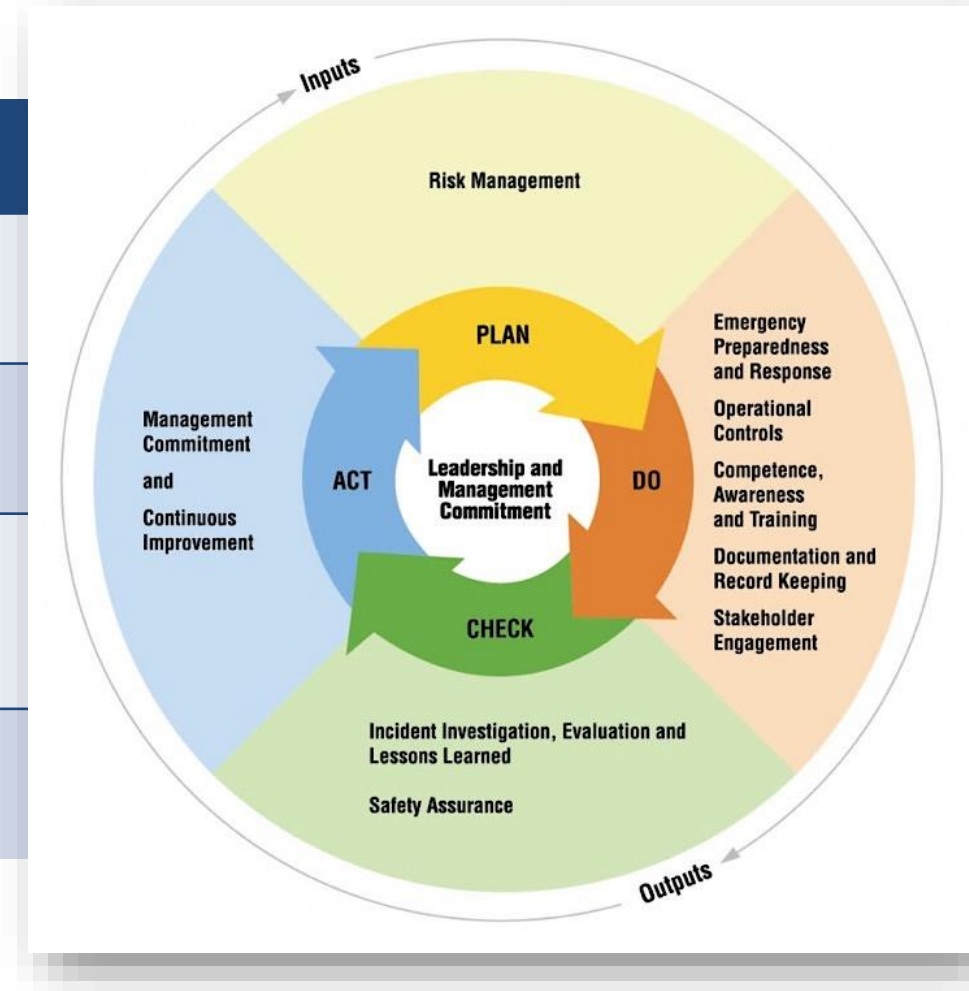
PIPELINE SMS BY PIPELINE OPERATORS FOR PIPELINE OPERATORS

- SMS successful in other industries like aviation, nuclear, chemical
- NTSB recommended development of SMS specific to pipelines
- Pipeline SMS developed jointly by gas and liquids transmission, public and investor gas distribution, federal and state regulators
- Resulting Pipeline SMS exceeded expectations of NTSB
- Pipeline SMS supported by PHMSA

PIPELINE SMS FUNDAMENTALS

PIPELINE SAFETY MANAGEMENT SYSTEM – API RP 1173

10 ELEMENTS	Holistic Integrated Framework
SYSTEM	Flexible & scalable
CONTINUOUS IMPROVEMENT	Plan-Do-Check-Act
SAFETY CULTURE	The glue



PIPELINE SMS IS FLEXIBLE AND SCALABLE TO ANY SIZE OPERATOR

- SMS is a basic framework on core topics that apply to operating any pipeline system safely
- SMS is scalable to company sizes and operations
- Companies choose how in-depth they develop their SMS programs
- PSMS is flexible with existing company approaches
- Like companies that structure themselves differently to reflect their systems, needs and cultures, SMS can be customized to reflect the company

PIPELINE SMS IS NOT:

- A one size fits all approach
- Something only large companies do
- Something you can't customize to fit your own unique needs
- A one-and-done or check-the-box type of activity
- A quick fix approach to pipeline safety

EXAMPLES – LEARNING WHERE YOU ARE AND WHERE NEED TO GO

#1 - Safety Culture

1. Employees may be unaware they have the right to stop the job if there is an unsafe condition
2. Employees know they have the right to stop the job, but there is no evidence anyone ever has
3. Know rights and there are occasions where stopped because they identified an unsafe condition
4. Know rights, have stopped, then employer used those situations as examples in training and shared those scenarios with rest of employees

EXAMPLES – LEARNING WHERE YOU ARE AND WHERE NEED TO GO

#2 – Procedure Review

1. Review operation procedures as needed
2. Review some annually, but not all
3. Review all annually, but only to meet regulatory requirements. Could be better at documenting and communicating changes that are made
4. Review annually, document and communicate changes made
5. Review annually, consider feedback and information gathered throughout the year to make changes, and document and communicate changes that are made

EXAMPLES – LEARNING WHERE YOU ARE AND WHERE NEED TO GO

#3 – Construction Practices

1. Know how to do the work based on how we were taught to do it. Don't have written requirements, specification to tell how work needs to be done
2. Some written specifications for design, but otherwise are free to do the work as we think best
3. Have written specifications for design, allowed to deviate without approval, but have to document changes that were made
4. Have written specifications, can deviate, but have to get approval and document
5. Written specifications, can deviate, need approval, do document. Perform quality inspections to ensure things are constructed per the design or the approved changes

PSMS BENEFITS – OPERATOR’S PERSPECTIVES

PSMS benefits of implementation from the Operator’s perspective:

Jim Crowley, Manager – Gas, Meter & Corporate Safety
Easton Utilities

HELP FOR LEARNING ABOUT AND IMPLEMENTING PIPELINE SMS

- Industry is here to help operators learn about and implement SMS
- Industry-wide team of gas and liquids transmission, public and investor gas distribution systems working together
- Materials available describing Pipeline SMS
 - What, how and why to adopt pipeline SMS
 - How to get started
 - Planning tool assess where you are and what you should work on
 - Evaluating progress developing own customized Pipeline SMS

PIPELINE SMS TOOLS & COMMUNICATIONS

WEBSITE www.pipelinesms.org
Revamped in 2018 to improve functionality

BOOKLETS



TOOLS

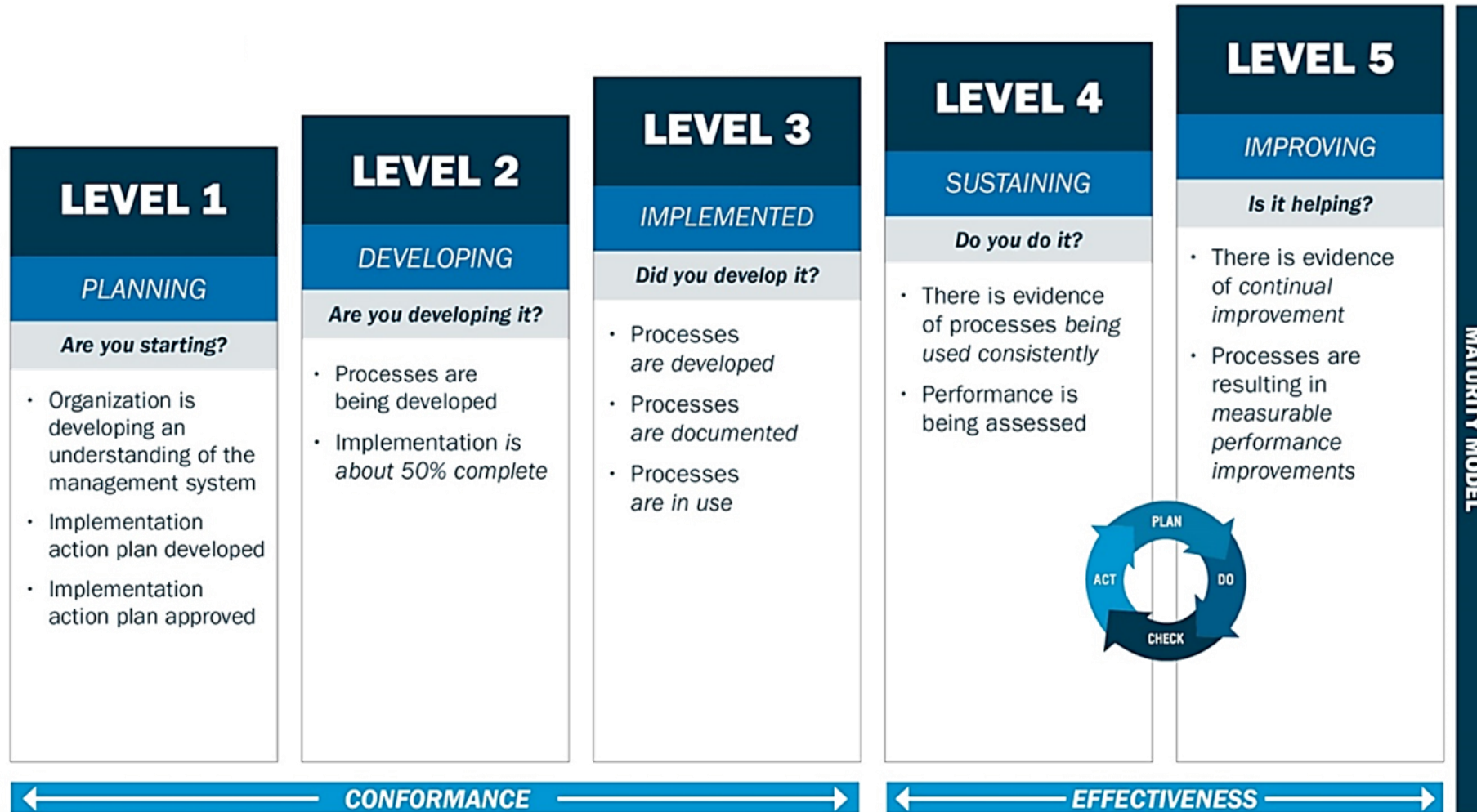
- ✓ SMS Maturity Model
- ✓ Planning and Implementation *gap* assessments
- ✓ APGA PSMS Planning Tool
- ✓ Evaluation *effectiveness* assessment
- ✓ Peer-to-peer sharing practices
- ✓ Voluntary API third-party assessment program



WORKSHOPS & WEBINARS

- ✓ 2017 and 2018 materials available on-line at www.pipelinesms.org

THE SMS JOURNEY



PSMS ROADMAP

TOOLS TO HELP ALONG THE JOURNEY



GETTING STARTED

- Study API RP 1173
- Attend workshops
- Consider the benefits
- Talk with peers
- Obtain management commitment to API RP 1173 implementation
 - Liquid operators: [Commitment Letter](#)
 - 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 up to Level 3 or 4 maturity

EVALUATION TOOL

- Comprehensive set of questions with ratings for all aspects of API RP 1173
- 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
- Determines Effectiveness score



CONFORMANCE CHECKLIST (all API RP 1173 "shall" statements)

PEER-TO-PEER SHARING APPROPRIATE AT ALL MATURITY LEVELS



VOLUNTARY API THIRD-PARTY AUDIT PROGRAM

- API-administered audit program for conformance to API RP 1173
- Yields an objective evaluation and score to measure continuous improvement and/or benchmarking
- Appropriate at Level 3 maturity or beyond

PIPELINE SMS INDUSTRY TEAM

Increase Industry Participation

Trade Association SMS Alignment

- Strategic Plans
- Conferences
- RP & Committee Alignment
- Award Criteria

Industry Annual Survey

Industry SMS Annual Awards

“Barrier to Entry” Determination

Ensure Proactive External Engagement

“One Industry, One Mission” Communications

Target Audience:

- Contractors
- Regulators

Annual Report

Provide Ongoing Support for Operator Journeys

Training & Education

- Workshops
- Conference Calls
- E-Learning (API)
- PipelineSMS.org Website

3rd Party Voluntary Assessment

Culture Survey for Operator Use

Culture Survey for Operator Use

Element “deep dives” by year
(e.g. Risk Management and MOC)

Provide Governance & Oversight

Finalize Industry Team Charter

Reaffirmation / Reauthorization of 1173

Team meeting structure / scheduling

Membership

- Roster by Industry Segment
- Roles & Responsibilities
- Terms
- Rotation

WHAT'S NEXT?

- PRACTITIONER MENTORSHIP PROGRAM
- ELEARNING: API RP 1173 (AVAILABLE END OF MAY) AND API RP 1175 (AVAILABLE NOW ON API LMS)
- WEBINAR: Practitioners & SMS Program Managers | June 4th, 11a – 12:30p EDT
 - Considering additional webinars for beginning journey... based on survey feedback
- WORKSHOP: Making it Real | December 4th and 5th, 2019

Interested in getting engaged with the team?

Contact the Industry Team at pipelinesms@api.org

Need your input... Please complete the survey

WRAP-UP

- Implementing PSMS is a journey, not a destination
- Companies and systems are at different stages: beginning, modifying, improving
- No matter what stage in process, just want to see improvement trend
- ***All*** companies have gaps or areas where can improve
- Finding issues to fix is a good thing

A photograph of an industrial facility, possibly a water treatment plant, featuring a complex network of large pipes, metal walkways, and stairs. The scene is brightly lit, suggesting a sunny day. The text is overlaid on the center of the image.

WE WANT TO HEAR FROM YOU

THANK YOU