

API/AOPL PIPELINE SMS IMPLEMENTATION TEAM

LIQUIDS PIPELINE SMS CONFORMANCE WORKSHOP

JUNE 13, 2017 • HOUSTON, TEXAS



WELCOME

- Safety Moment
- API Antitrust Statement
- Introduce API Pipeline SMS Implementation Team



TODAY'S WORKSHOP

- Focusing on the “How”
- Interactive and engagement
- Breakout sessions and networking
- Conformance tools



LOGISTICS

- Agenda
- Plenary Session
- Rotating breakout sessions — morning
- Lunch
- Full group session - afternoon



WHAT DOES SUCCESS LOOK LIKE

- Participants
 - ✓ Identify key takeaways
 - ✓ Network, network, network
 - ✓ High level of engagement
 - ✓ Contacts for future help
 - ✓ More questions than answers
- Implementation Team
 - ✓ Your feedback



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



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.



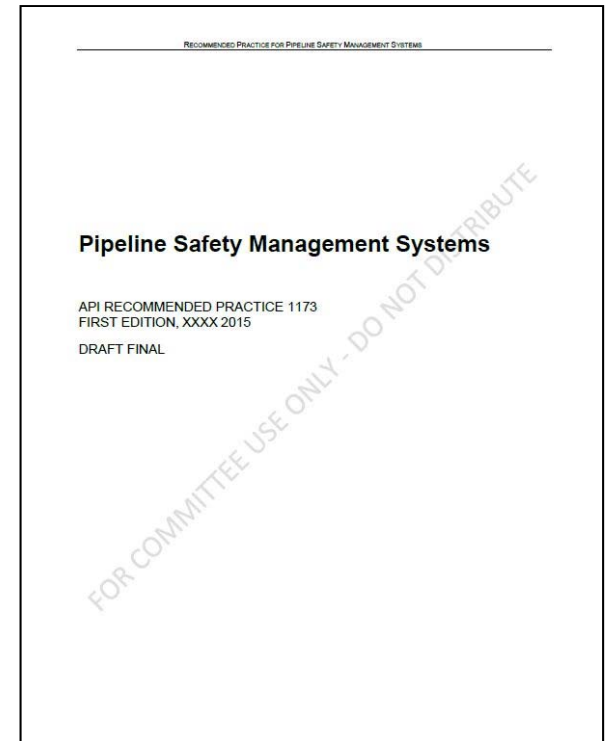
SMS DEVELOPMENT COMMITTEE MEMBERS

- 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 Stoodly, AOPL



RP 1173 REACHES BEYOND TRADITIONAL STANDARDS

- RP 1173 — more philosophical than other RP's and Standards
- The relationship of Safety Culture to Pipeline SMS is greatly expanded
- RP 1173 has the potential to have greater impact on safety performance improvement than many traditional standard setting efforts
- RP 1173 provides an overarching set of ideals for management and employees to pursue safety improvement
- The ideas within RP1173 have evolved through months of team discussion to be practical and within reach of all operators



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



SYSTEMATIC MANAGEMENT

- What does it mean to act with intentionality?
- What acting with intentionality doesn't mean . . .
 - Learning about unmitigated risks when you happen to think about it.
 - Assessing compliance when you have time.
 - Engaging external stakeholders when they reach out to you.
 - Occasionally reviewing emergency response plans.
 - Meeting with integrity management personnel after an incident.



WHERE DO I START?

- 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
- 1. Read the practice several times to gain the overall intent
- 2. List your perception of explicit requirements
- 3. Gather your existing procedures and processes, including your MS if you've already started
- 4. Identify gaps and prioritized steps to close the gap
- 5. Repeat . . . PDCA — Watch for assured results
- 6. Take advantage of workshops and your peers'
- 7. Use the tools on www.pipelinesms.org



MORNING PLENARY SESSION

- 8:15- 8:45 - Conformance Audit Tool
- 8:45- 9:10 - Survey Results & Annual Report



CONFORMANCE TEAM: TERMINOLOGY

- **Conformance:** The PSMS Program addresses all the requirements of RP 1173
- **Effectiveness (Two parts):**
 - The PSMS program is being effectively implemented as designed (Effectiveness of Implementation)
 - The Purposes of the PSMS are being achieved (Effectiveness of Results)



LEVELS OF CONFORMANCE / EFFECTIVENESS

	Level	Description
Conformance	0	Nothing has been started
	1	Gaps have been identified and plans developed
	2	Development of programs is about 50% complete
	3	Programs have been developed
Effectiveness	4	Programs have been audited and are being implemented as designed
	5	The purposes of the PSMS programs are being achieved

CONFORMANCE TOOLS (BEING FINALIZED)

- Available for internal use as desired
- 68Q SS — Questions for every Sub-Element; Levels 0-4, with examples
 - Based off Gap Analysis SS
- 234Q SS — questions for every “Shall” statement; Levels 0-4, with examples
- No scoring system. Every question and answer stands on its own.



LEVEL 5 EFFECTIVENESS - PLANS

- Some hard performance metrics:
 - PHMSA Significant, Serious, Impacting People or the Environment (IPE)
 - OSHA TRIR
- Subjective “indicators” as to whether Purposes of the RP are being achieved at a high level (about a dozen topics)
 - Red, Yellow, Green



FUTURE: INDUSTRY-STANDARD AUDIT PROGRAM

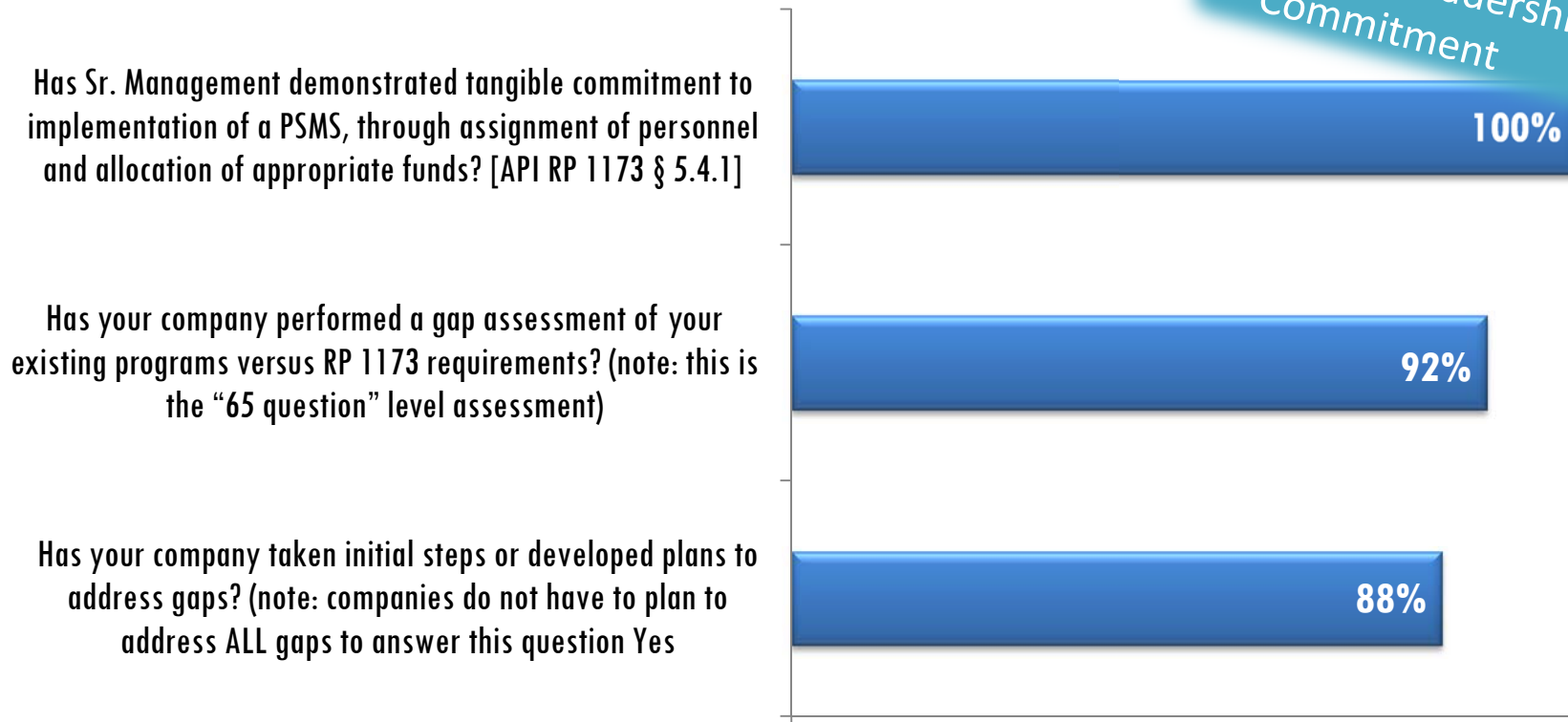
- Non-mandatory
- Managed by API Global Industry Services
- Defined Audit Program / Auditor Qualifications
- Standardized Audit Reports
- Scores (useful for benchmarking; internal tracking of progress)
- Pilot in early 2018



DEMONSTRATING IMPLEMENTATION PROGRESS RESULTS

Initial Conformance

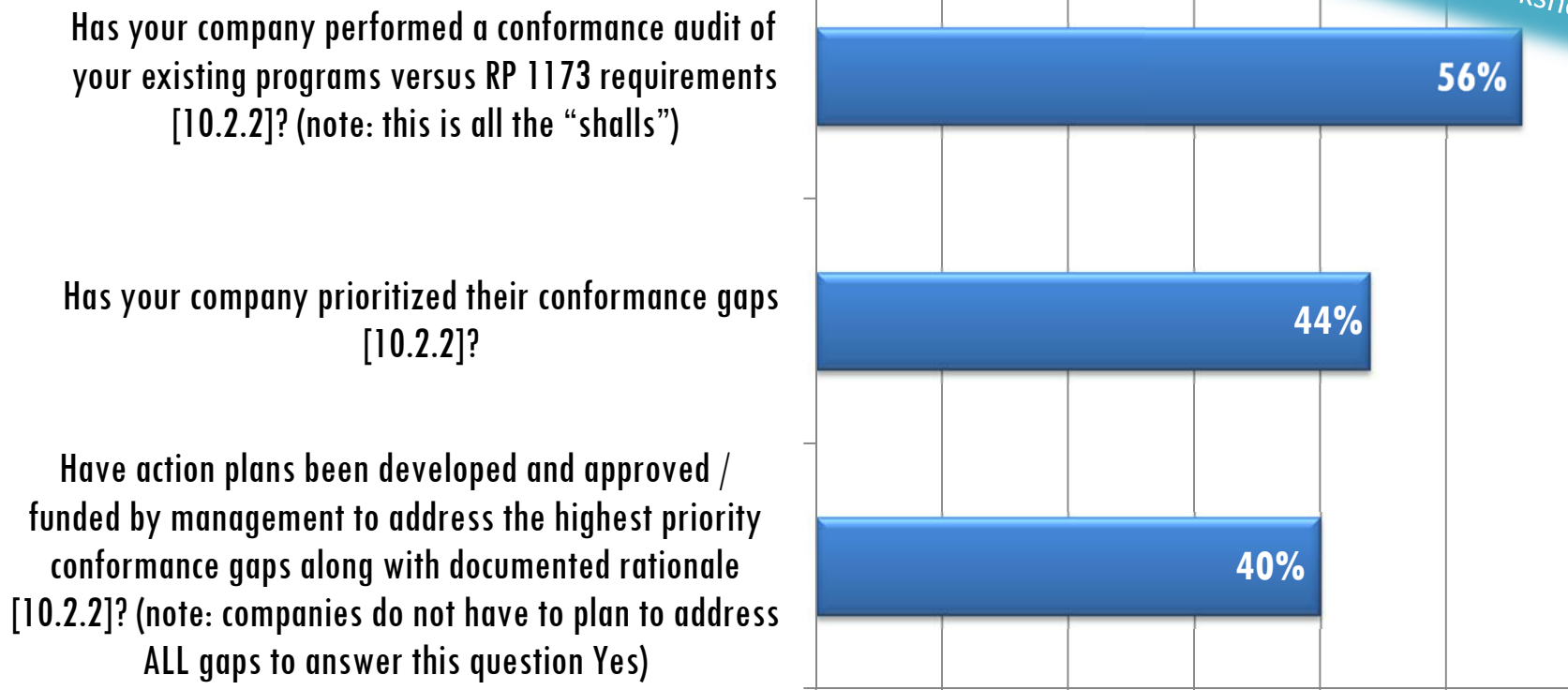
✓ Strong Start
✓ Strong Leadership
Commitment



DEMONSTRATING IMPLEMENTATION PROGRESS RESULTS

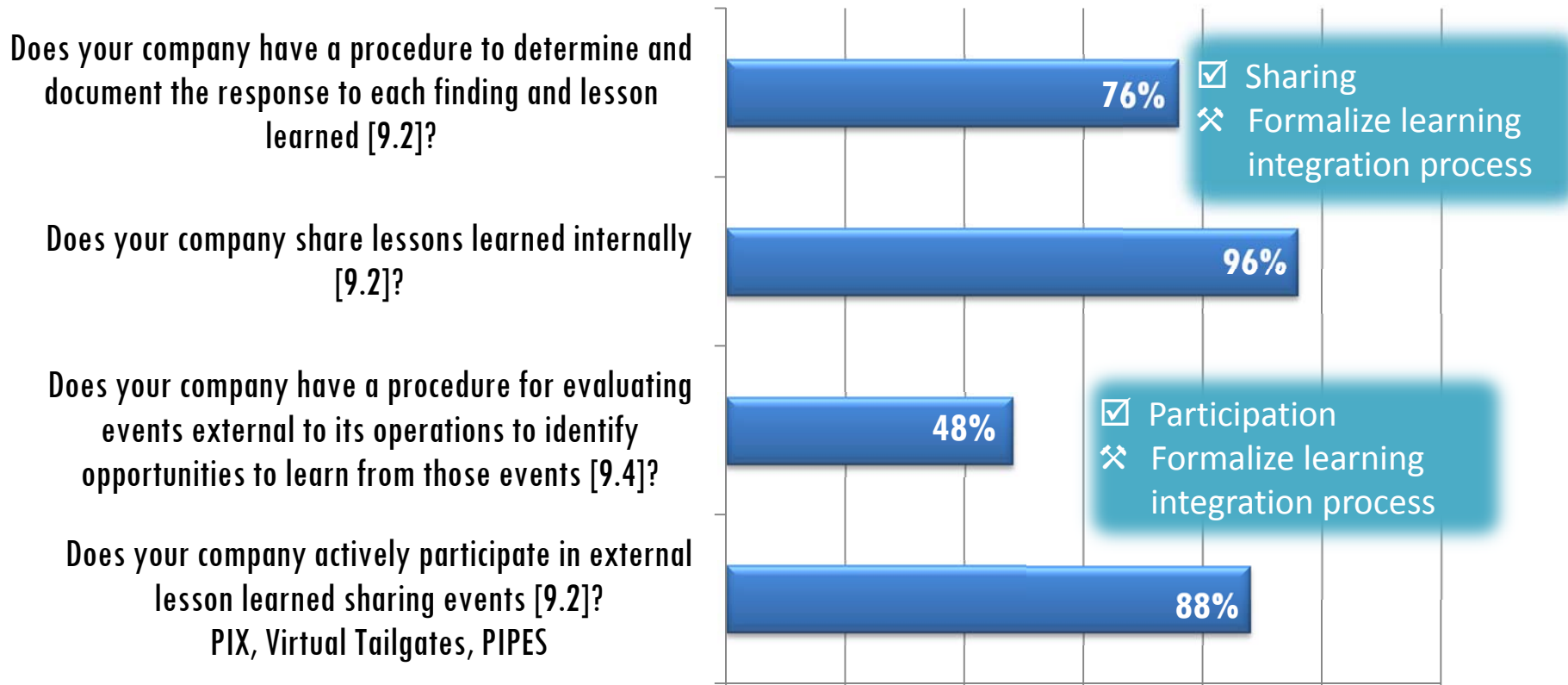
Conformance Audit

Industry Conformance Audit tool scheduled for rollout at the June 13th Workshop



DEMONSTRATING IMPLEMENTATION PROGRESS RESULTS

Sharing and Learning



DEMONSTRATING IMPLEMENTATION PROGRESS RESULTS

Overall Management System Execution

*Moving forward with
utilizing Management
Systems*

Has your company established the internal management review process, and conducted at least one management review per API RP 1173 §11.1 requirements?

64%

Is your company maintaining a method to evaluate the extent to which is it developing and deploying Pipeline SMS per API RP 1173 §10.2.5 requirements (Maturity)?

48%

2016 ANNUAL REPORT



MORNING BREAKOUT SESSIONS

	REGENCY C	REGENCY D	WESTHEIMER
	CUSTOMIZING API RP 1173 TO FIT	MANAGEMENT REVIEW	STAKEHOLDER ENGAGEMENT
9:20-10:05	RED	BLUE	GREEN
10:15– 11:00	GREEN	RED	BLUE
11:10-11:55	BLUE	GREEN	RED



LUNCH

25



Pipeline SMS
GROUP

It's A JOURNEY, NOT A DESTINATION

- 1:30-2:00
- Main Room

