

PIPELINE SAFETY MANAGEMENT SYSTEMS

—
Pipeline SMS
2023 Annual Report



Pipeline SMS

www.PipelineSMS.org

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PIPELINE SMS: ONE INDUSTRY, ONE GOAL

Pipeline operators remain committed to implementing API Recommended Practice (RP) 1173, *Pipeline Safety Management Systems (Pipeline SMS)*, since its initial publication in 2015.

Pipeline SMS implementation has expanded beyond liquid operators to include gas distribution, transmission and gathering operators, as well as the contractor community, all in the shared goal of operating with zero incidents on a voluntary basis. The Pipeline SMS Industry Team represents all segments of the pipeline industry and helps drive implementation priorities and activities.

In 2023 the Industry Team began revisions on the first edition of RP 1173, published contractor guidance tools, conducted a safety culture survey among transmission operators and many more critical activities to support the industry’s implementation journey of continuous improvement towards the combined vision of One Industry, One Goal, Zero Incidents.



LETTER FROM THE OUTGOING TEAM CHAIR

Pipeline safety has been at the forefront of my career for over four decades. I am proud to say I have been a part of numerous improvements and initiatives to improve the safety of energy pipelines, better protect people and the environment and strive towards the goal of zero operating incidents. Pipeline safety management systems are one of the most critical initiatives the pipeline industry has undertaken in pursuit of this significant mission.

I am honored to have had the opportunity to lead the Pipeline SMS Industry Team over the past year. During this time, the Team conducted a safety culture survey of over 31,000 employees among gas and liquid pipeline operators in the U.S. and Canada. This alignment was the first time transmission operators across our industry trade groups participated in the same survey and embodies the “One Industry, One Team” mission. At Kinder Morgan as well as with some of our peers this survey was also completed by other business units and provides data outside of gas/liquid transmission operations. Our data is further strengthened by recurring surveys, in a similar format and survey questions, among distribution operators and contractors in a three-year cycle. This expanded data opens our view to our Corporate and Industry culture and enhances our efforts on the continuous improvement cycle.

The RP 1173 Task Group also began revisions on the first edition of RP 1173, with a goal to publish a second edition in 2025, ten years after initial publication. The Task Group features over 100 members from operators, federal and state regulators, safety experts, service providers and public safety advocates, all working in tandem to improve RP 1173 and pipeline safety. During my time as chair, the Industry Team also published significant guidance to contractors, building off the [Contractor’s Guide](#) published in 2022. The [Contractor Implementation Tool](#) serves to better align contractors’ and operators’ safety programs as well as gauge implementation progress and maturity.

While these represent just a few of the important developments around Pipeline SMS, we realize there is always more work to be done towards our goal of zero operating incidents. I look forward to watching the Team continue to support the industry’s voluntary implementation and proactive progress on Pipeline SMS under the leadership of incoming chair Giorgina Franklin.

PATRICK CAREY

Director, Operations (Retired)
Kinder Morgan

Outgoing Pipeline SMS Team Chair

LETTER FROM THE INCOMING TEAM CHAIR

I'd like to thank and recognize Pat Carey for his exceptional leadership as Chair of the Pipeline SMS Industry Team, building off a long history of remarkable leaders moving our industry forward. Having served on the Team for several years before assuming the Vice Chair role, I have had a distinct opportunity to learn from these leaders who are dedicated to the mission of continuous improvement across our industry through Pipeline SMS implementation and improved pipeline safety.

Pipelines are the safest way to transport natural gas, oil and numerous other products. As a distribution pipeline operator, we recognize the importance of how we operate near homes, schools, hospitals and other businesses across our five-state territory. We take our responsibility to safely deliver energy seriously. My role as Pipeline SMS Chair plays a crucial role in bringing this mission to life across our industry including embodying my company's vision of Safety: People and Pipeline, It's What We Do!

Mid-way through 2024, our Team is busy supporting the industry's proactive and voluntary implementation of RP 1173 in close coordination with government partners. Our Team supported PHMSA's Request for Information among distribution operators last fall, culminating in a report to Congress on operators' implementation progress and maturity expected this summer. We also supported an NTSB investigation that included a recommendation expounding on the benefits of Pipeline SMS and encouraging voluntary implementation. Participating in these types of information collection requests and investigation recommendations can demonstrate the industry's tangible commitment and progress along our ongoing journey of continuous improvement.

This year, our Team is continuing to make significant progress revising the first edition of RP 1173, with publication of a second edition on target for 2025. This multi-stakeholder group illustrates the consensus-driven process behind industry standards and recommended practices. While the Team is continuing to work on the final details, we anticipate the second edition will include an annex for very small operators to provide guidance on implementing core principles and foundational elements of Pipeline SMS. In the spirit of "One Industry, One Team", we are also publishing a video-based training for contractors and field personnel to illustrate how their roles connect to Pipeline SMS. When completed, this training can be branded accordingly and embedded in companies' internal training systems to reinforce the connection from what they do on the job to PSMS.

I am honored to have this distinctive opportunity to lead the cross-segment Pipeline SMS Industry Team on our journey of continuous improvement and zero operating incidents.

GIORGINA FRANKLIN

General Manager, Natural Gas Pipeline Safety
Duke Energy & Piedmont Natural Gas

Incoming Pipeline SMS Team Chair

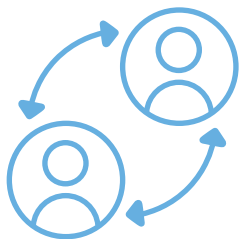
2023 KEY EVENTS

The Pipeline SMS Industry Team conducted numerous activities and supported many others throughout 2023 to facilitate industry understanding and implementation of RP 1173. The Team focused specifically on four key areas to support operator journeys:



PROVIDING OPERATOR & CONTRACTOR SUPPORT

- Conducted three API Pipeline SMS Third-Party Assessments and updated the benchmarking report among past participants for distribution
- Began understanding unique contractor challenges to better support this key stakeholder group, hoping to utilize a similar assessment approach as the Industry Team uses for operators.
- Surveyed over 31,000 pipeline employees among 22 US and Canadian gas and liquid transmission operators with an 81% response rate
- Published an [Implementation Tool](#) to assist contractors and service providers in planning SMS implementation and measuring the maturity of their safety programs
- Attended the Distribution Contractors Association annual conference and hosted a [May 11 webinar](#) with the Pipeline & Gas Journal to discuss contractor resources
- Began development of a computer-based training (CBT) for field-level staff and contractors to be completed and advertised in 2024



ENGAGING STAKEHOLDERS

- Published the [2022 Annual Report](#) highlighting voluntary implementation progress and milestones
- Distributed the report to external stakeholders, including regulators and public safety advocates, on industry's commitment to and implementation of Pipeline SMS
- Showcased leading implementation practices and contractor guidance materials during the 2023 API Pipeline Conference in Nashville, TN
- Engaged PHMSA staff on fulfilling Section 205 mandates from the 2020 PIPES Act on gas distribution implementation progress and maturity



INCREASING INDUSTRY PARTICIPATION

- Conducted the 2023 Annual Survey among transmission and gathering line operators, representing nearly 85% of mileage as implementing Pipeline SMS
- Began development of an annex for Very Small Operators to be included in API RP 1173, 2nd edition, targeted for publication in 2025
- Identified leading practices, barriers to entry and implementation challenges using Annual Survey results
- Encouraged distribution operators to respond to PHMSA's voluntary Request for Information and shared data from previous Annual Reports



ENSURING GOVERNANCE & OVERSIGHT

- Kicked off monthly meetings of the RP 1173 Task Group to revise RP 1173, 1st edition with over 100 participants including operators, service providers, federal and state regulators and public safety advocates,
- Approved nomination of contractor representative as incoming Vice Chair to support contractors' implementation journey.



PIPELINE SMS CONTRACTOR GUIDANCE AND NEXT STEPS

In November 2022, API and the Pipeline SMS Industry Team published Pipeline SMS: A Contractor’s Guide (Guide) to give pipeline contractors and service providers an enhanced understanding of how the scope of their work should be integrated with an operator’s Pipeline SMS. The Guide distills API RP 1173’s 234 requirements down to 56 key requirements where, depending on a contractor’s scope of work, they can focus their efforts on building robust safety programs that naturally align with their customer-operators’ Pipeline SMS programs.

As a complement to this Guide, API and the Team published an Implementation Tool (Tool) in April 2023 that can aid contractors and service providers in gauging the implementation progress of the 56 key requirements in the guide. The Tool allows contractors to quickly conduct a gap assessment to the 56 requirements found in the Guide, plan actions to help them conform to those requirements, and to provide examples of actions appropriate for their perceived safety program maturity. This Tool is available for free on www.PipelineSMS.org.

Req ID	Requirement	Current Status	Target Status
1.101	The management shall be able to demonstrate its commitment to the development, implementation, maintenance, and continuous improvement of the Pipeline SMS as a condition of the award of the contract.	Not Implemented	Target Implemented
1.102	The management shall be able to demonstrate its commitment to the development, implementation, maintenance, and continuous improvement of the Pipeline SMS as a condition of the award of the contract.	Not Implemented	Target Implemented
1.103	The management shall be able to demonstrate its commitment to the development, implementation, maintenance, and continuous improvement of the Pipeline SMS as a condition of the award of the contract.	Not Implemented	Target Implemented
1.104	The management shall be able to demonstrate its commitment to the development, implementation, maintenance, and continuous improvement of the Pipeline SMS as a condition of the award of the contract.	Not Implemented	Target Implemented
1.105	The management shall be able to demonstrate its commitment to the development, implementation, maintenance, and continuous improvement of the Pipeline SMS as a condition of the award of the contract.	Not Implemented	Target Implemented
1.106	The management shall be able to demonstrate its commitment to the development, implementation, maintenance, and continuous improvement of the Pipeline SMS as a condition of the award of the contract.	Not Implemented	Target Implemented
1.107	The management shall be able to demonstrate its commitment to the development, implementation, maintenance, and continuous improvement of the Pipeline SMS as a condition of the award of the contract.	Not Implemented	Target Implemented



The Tool, as well as the Guide, were developed in close collaboration with contractor representatives and associations to facilitate alignment. API also presented at numerous contractor conferences and conducted webinars on these resources to further socialize them within the contractor community.

In 2024, API will build upon the progress that the Industry Team has made in preparing the Guide and Tool by piloting a new Third-Party Contractor Assessment Program that aims to bring safety management system expertise to the contractor community to help these key stakeholders build more robust safety programs that inherently align with their client-operators' Pipeline SMS. As such,

API and the Industry Team have decided to pursue this effort, which will help ensure that safety programs are naturally aligned and therefore better able to facilitate collaboration and communication between operators and contractors. API has planned three contractor assessment pilots with contracting companies in the first quarter of 2024. After these are conducted and adjustments are implemented, the API Pipeline SMS Contractor Assessment Program will officially roll out for assessments among contractors and service providers. Pipeline operators can also encourage their specific contractors to participate in the Program or utilize the available tools.

The purpose of the creation of a Pipeline SMS Assessment for Contractors is not to create new requirements for contractors to follow, but rather to align the community around a common set of safety guidance that better allows for safety collaboration and communication between the operators and their contractors, helping to ensure more efficiency and alignment across the industry.



API PIPELINE SMS THIRD-PARTY ASSESSMENT PROGRAM UPDATES

API kicked off the Pipeline SMS Third-Party Assessment Program in January of 2020. Since this time, API has conducted assessments at a variety of different operators. From large liquid operators to small gas distributors, this program continues to support industry's implementation efforts by providing an expert assessment of maturity (using the Industry Maturity Model found on PipelineSMS.org). By the end of 2023, API has conducted 17 assessments at 16 operators, with one operator coming back to us for our first repeat assessment. A breakdown of the types of operators assessed is below:

Small Liquids
Operators

4

Large Liquids
Operators

4

Large Gas
Distributors

7

Combined Liquids
and Gas Operators

1

Small
Utilities

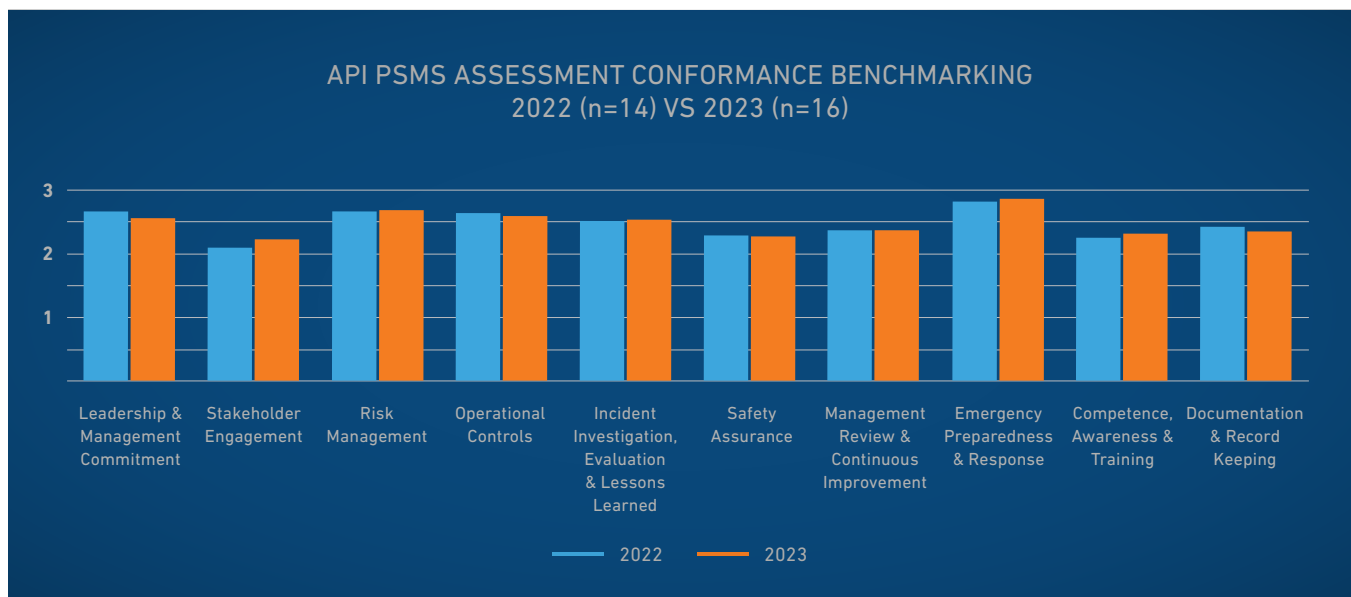
1

In 2023, API conducted 3 additional assessments. One of these assessments was the first repeat assessment conducted, enabling an operator to start trending their own internal maturity scores that are validated by third party experts. API was impressed to see that this operator greatly increased their maturity scores in their repeat assessment, taking them from the 3rd quartile of conformance performance to the 1st quartile of conformance performance in just three years' time. This is analogous to the strides that can be made as operators focus on specific areas where they may need to improve their SMS – and that these improvements can be quantified.

In 2023, the Industry Team worked together with the contractor community to understand their specific challenges, and collaborated to ensure that the documents and planning efforts relevant to contractors that are now published on PipelineSMS.org are fit for purpose and easily implemented – ensuring that any future efforts, including a potential assessment program, works hand-in-hand with other efforts to streamline safety management across the industry. While API conducted fewer assessments in 2023 than in previous years, API has also seen many more operators scheduling assessments for 2024 during the year. As such, we anticipate that the number of assessments conducted in 2024 will increase dramatically, providing much needed data to inform the benchmarking efforts. This effort also helps the Industry Team inform the areas where they can provide more direct support to operators and contractors as they continue their PSMS journeys.

BENCHMARKING INDUSTRY PIPELINE SMS MATURITY

2022 was a landmark year for the Pipeline SMS Assessment Program, with the first ever Benchmarking Reports distributed to past participants. This blinded and anonymous statistical analysis gives companies a detailed view of their assessment results relative to the other participants. In 2023, with only three assessments for operators being conducted, the industry average maturity scores did not change much. However, there are a couple of notable takeaways from this years' benchmarking distribution that the industry can use to inform future efforts.



First, the two Pipeline SMS Elements with the lowest average maturity in 2022 were Stakeholder Engagement (Maturity of 2.12) and Competence, Awareness and Training (Maturity of 2.27). In 2023, the benchmarking shows that these two elements saw the largest increase in average maturity of any of the elements. Stakeholder engagement increased in average maturity by 0.12 on the maturity scale, and Competence, Awareness and Training increased by .07 on the maturity scale. While these are not large changes, they represent a trend in a positive direction, something the Industry Team is especially interested in. With API's recent publication of RP 1185 *Pipeline Public Engagement*, the Industry Team hopes that more companies will focus on the Stakeholder Engagement element, and there will be more progress seen in its implementation.

Benchmarking data is only available to those who conduct assessments with API. Benchmarking to date has revealed that the industry averages of implementation are all above a PSMS Maturity of 2 (almost above 2.25). With 8 assessments currently in process for 2024, the Industry Team is confident that the program will continue to grow, and will continue to provide much needed data to inform future support for the industry.

THE AMERICAN GAS ASSOCIATION'S (AGA) ENHANCED PEER REVIEW PROGRAM



This program allows natural gas utilities to evaluate their peers, share leading practices and identify opportunities to better serve customers and communities. Each review involves AGA staff and the subject matter experts from member utilities who are dedicated to helping the host utility improve. The Enhanced Peer Review Program includes the option for companies to have in-person peer reviews and/or virtual assessments. While each of the 17 topics incorporates some discussion on how the operator is implementing its own PSMS relative to the applicable elements, the following topics focus exclusively on specific PSMS Elements:

IN-PERSON PEER REVIEWS:

- *PSMS Elements 4 & 10: Operational Procedures/ System Controls; Documentation & Recordkeeping*
- *PSMS Elements 6 & 7: Safety Assurance; Management Review & Continuous Improvement*

VIRTUAL ASSESSMENTS:

- *PSMS Element 4: Management of Change*
- *PSMS Element 5: Incident Investigation, Evaluation & Lessons Learned*
- *PSMS Element 6 & 7: Safety Assurance and Management Review*
- *PSMS Element 9: Competence, Awareness, & Training*

Over 50 AGA member utilities participate in this voluntary program, which has been in place for over 10 years. SMEs from other gas utilities work together in providing a constructive critique of another company that has selected 2 or 3 topics to be featured. Interviews are conducted and information & company documents are reviewed during the week. At the conclusion, a written report is provided to the executives from the host gas company with a 3-hour discussion that is focused exclusively on how the company can enhance its performance. In 2024, a total of 13 peer reviews are scheduled. AGA's Enhanced Peer Review Program is restricted to utility members only and the information is kept strictly confidential. Six of the 13 scheduled Peer Reviews in 2024 have one of the topics chosen above that is focused on PSMS.

Pipeline Safety Management Systems (PSMS) Executive Steering Committee: Formed in October 2020, the PSMS Executive Steering Committee promotes the sharing of incidents and near misses, assists the industry in advancing PSMS, and provides oversight and guidance on implementation of AGA PSMS initiatives. The PSMS Executive Steering Committee reports to the AGA Board.

ASSOCIATION PIPELINE SMS UPDATES



MID-WEST ENERGY ASSOCIATION



MEA serves the people that deliver electricity and natural gas to homes and businesses. Our mission is to empower the energy industry through education, leadership development, and industry connections.

Key resources for members include Energetic Women, Field Leader Training, Gas Operations Technical & Leadership Summit, the National Gas Rodeo, and our enhanced EnergyU online course platform.

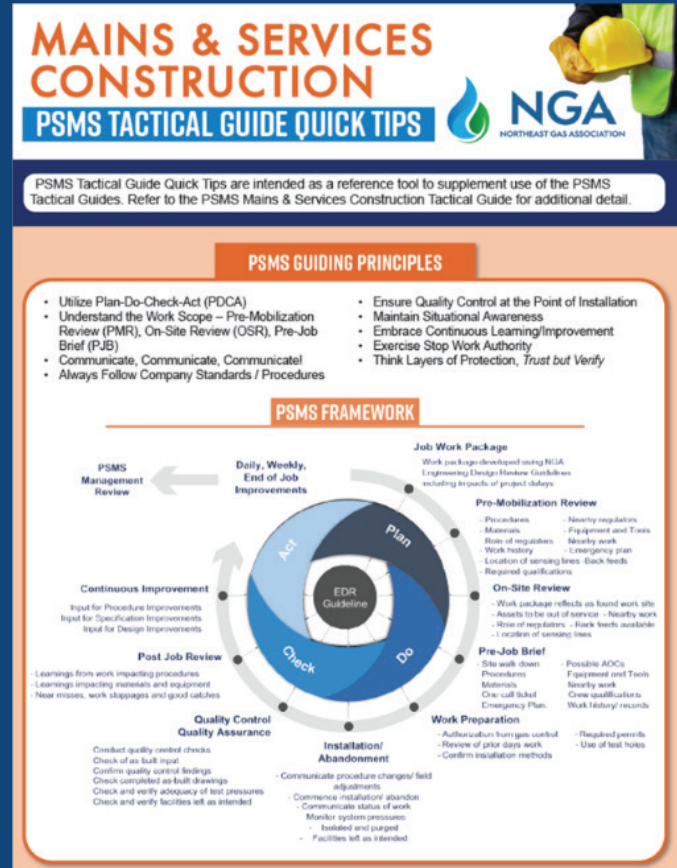
NORTHEAST GAS ASSOCIATION CONTINUED FOCUS ON OPERATIONALIZING STRATEGY

What started as a pledge to improve our safety performance has become our way of working together. Through the Northeast Gas Association (NGA), we collaborate to share information and continuously learn in a group setting because we know it's our best pathway to meet the safety standard we have set for ourselves and the public we serve. In December of 2018, the NGA Board of Directors approved the creation of a committee to specifically concentrate on embedding API RP 1173 principles into day-to-day natural gas utility operations. The Committee's focus is on operationalizing a safety management system strategy by adopting a Plan-Do-Check-Act (PDCA) framework applicable to daily engineering, construction, operations, and maintenance activities. Our leaders' line of sight on how this strategy drives down risk is an ongoing, evergreen process. NGA's members are committed to applying these fundamental principles of continuous improvement with every decision and every action, with the goal of zero incidents.

As we transition from an implementation to a sustainability focus, operators continue to embed PDCA concepts using operationally focused PSMS Tactical Guide engagement tools developed specifically for distribution system gas operations and construction. In 2023, NGA PSMS Collaborative members took this a step further, based on feedback from field crews, and embarked on an effort to further transform tactical to practical. Working together with front line supervision and field technicians, we continued the engagement journey with the introduction of “field friendly” PSMS Operational Quick Tips. These PSMS Job Aids provide practical technician focused tips, connecting the dots with API RP 1173 elements with specific work functions and tasks by providing specific guidance for day-to-day operations focused on “What Does PSMS Mean to Me?”

Further, we have provided members with a collaborative environment to transform existing operating practices, behaviors and ultimately, safety culture, through implementation of applicable elements and principles in RP 1173. The unique nature of the collaborative is inclusive of regional pipeline safety regulatory participation. Our regional pipeline safety regulators are viewed as true pipeline safety partners and have fully supported and participated in the PSMS Implementation Collaborative since its inception. This inclusive approach to embracing pipeline safety management system core principles has proved to be invaluable in demonstrating a unified commitment to PSMS by walking the pipeline safety talk.

In summary, while we can never forget the tragic nature of industry incidents that have brought us together in this journey to sustainably improve safety culture through adoption of PSMS fundamentals, this unique collaborative approach to PSMS implementation has proven to be a model others can potentially benefit from. Our members have demonstrated an unwavering commitment to continue to share lessons learned in a structured approach through the NGA PSMS Resource Center, including near misses and good catches, as we continue to enable our members to make PSMS “real” and influence behaviors of those that have the greatest degree of pipeline safety influence with every decision and every action, our front-line supervisors and field technicians.



LINKEDIN PSMS GROUP

Founded in 2018, the PSMS LinkedIn Group is a Community of Practice centered around the implementation of the API RP 1173. Our members represent all corners of the utility sector and routinely work across the aisles with the common goal of advancing pipeline safety. As of May 2024, the group has over 2300 members and a goal of reaching 3000 by the end of the year.

The PSMS LinkedIn Group provides the following five FREE value channels:

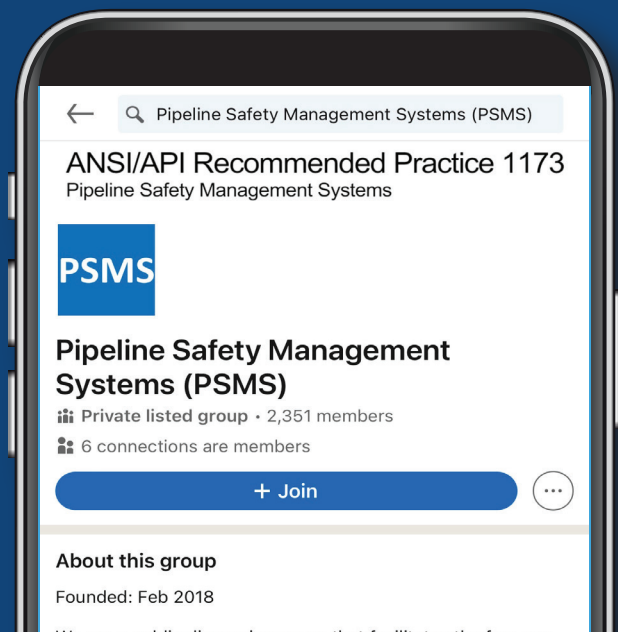
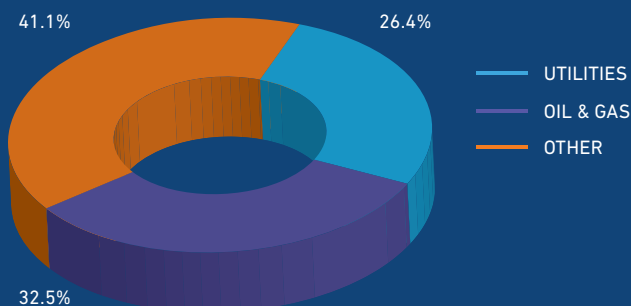
- **Table Events:** This is our main offering and most often involves subject matter experts from all parts of the industry presenting on their journey to implement PSMS.
- **Pop-Up Workshops:** Our newest addition, pop-up workshops are typically shorter, educational workshop style events designed to deliver practical tips and tools in a straight-forward format.
- **The Practice Exchange:** A first-of-its-kind opportunity for any organization on the PSMS implementation journey to engage with a panel of nine of the industry’s top thought leaders (in a public or private virtual session) and receive feedback that is fit for their organization’s purpose.
- **Group Discussion:** Members share their thoughts, ideas and opinions in the group discussion feed and engage around a number of topics.
- **Offline Engagement:** Members often first meet in the group and then carry on more targeted conversations offline. We continue to hear success stories of how operator and contractor members met subject matter experts in consulting or services in the PSMS LinkedIn Group.

JOIN THE GROUP!

Follow this link or scan the QR code to join:
<https://www.linkedin.com/groups/8650649/>



PSMS LINKEDIN GROUP MEMBERS INDUSTRY REPRESENTATION



RP 1173, FIRST EDITION REVISIONS

The first edition of API RP 1173 was published in 2015 after several years in development in a multi-stakeholder process, following a recommendation from NTSB. API standards and RPs are reviewed at least once every five years to determine if further action is necessary, including a five-year reaffirmation, publication of a subsequent edition, withdrawal or a two-year extension. In 2020, the RP received a two-year extension while next steps were determined, with the Task Group then deciding on a five-year reaffirmation in 2022. Leading management system experts had encouraged a minimum ten-year implementation period for operators to understand the requirements and begin their implementation journey before changes were made in a second edition.



In late 2022, the Industry Team and API formed the RP 1173 Task Group (TG) to lead the publication efforts towards a revised second edition with a targeted publication date of 2025. The group compiled a list of potential revisions from pipeline operators, focusing on areas of confusion or potentially unclear provisions. The TG consists of over 100 members from federal and state regulators, safety experts, service providers and public safety advocates. Along with the list of potential revisions, the Task Group solicited input from the API Third-Party Assessment Program, AGA Peer Review program, other third-party assessments, the safety culture survey and numerous others. The revised second edition will also likely include an annex for very small operators, demonstrating the flexible and scalable nature of the RP in practice for companies with fewer resources, less throughput and smaller customer bases. The annex will outline key considerations and foundational program elements for smaller operators, hopefully driving further commitment to and implementation of a Pipeline SMS.

The Task Group met monthly throughout 2023, with plans to maintain this cadence in 2024, bolstered by small group meetings. To date, work has focused on increasing clarity in the document, improving guidance on stakeholder engagement and better integrating safety culture provisions, among many others. With these improvements and more, the TG looks forward to issuing a revised second edition in 2025 to support operator journeys and improve pipeline safety performance.

REGULATORY ACTIVITIES



The Team supports increased efforts to encourage voluntary PSMS commitment and proactive implementation to maintain the potentially unlimited benefits on pipeline safety. The Team also stands ready to assist federal and state regulators and safety partners in their mission to better protect people, pipelines and the environment.

As part of the 2020 Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act, PHMSA was required to conduct and submit a report on the number of gas distribution operators implementing a PSMS based on RP 1173, their implementation progress and the feasibility for distribution companies to implement the RP based on their customer size and gas throughput. To fulfill this requirement, PHMSA launched a voluntary Request for Information (RFI) in the fall of 2023 using a questionnaire that closely mirrored the PSMS Team's annual survey. In support of PHMSA's efforts, the Team and various members personally encouraged distribution operators to respond to the survey regardless of their implementation maturity. While PHMSA ultimately received responses from less than 50% of distribution operators identified by Operator Identification number, the responses received did represent over 80% of distribution mileage. The Team continues to engage PHMSA to support voluntary implementation efforts and has offered to advocate on industry's proactive progress to Congressional or other relevant stakeholders.

In January 2024, the National Transportation Safety Board (NTSB) issued its formal report regarding the October 1, 2021, pipeline release in San Pedro Bay near Huntington Beach, CA. Notably, the final report

upgrades its 2023 recommendation on pipeline safety management systems (PSMS) to encourage a PHMSA advisory bulletin. NTSB identified the probable cause of the damage to, and subsequent crude oil release from, the underwater San Pedro Bay Pipeline as the proximity of established anchorage positions to the pipeline, which resulted in two containerships' anchors striking the pipeline when dragged in high winds and seas. Undetected damage to the pipeline which allowed fatigue cracks to grow and the pipeline to leak nearly 9 months later, coupled with insufficient training of its pipeline controllers, resulted in the failure to appropriately respond to leak alarms by shutting down the line.

At its December 5, 2023, meeting on the incident, NTSB included a recommendation to owners and operators of pipelines regulated by PHMSA to develop and implement a PSMS. However, the final report on the incident includes an NTSB recommendation to PHMSA to "issue an advisory bulletin to all Pipeline and Hazardous Materials Safety Administration-regulated pipeline owners and operators, promoting the benefits of pipeline safety management systems and asking them to develop and implement such a system based on American Petroleum Institute Recommended Practice 1173" (NTSB.gov). While PHMSA advisory bulletins do not carry the force of law or establish regulatory requirements, the Team will continue to work with PHMSA and regulatory stakeholders to promote successful PSMS implementation strategies, which do not include increased burdens to implement for operators or their customers that may come with regulatory compliance mandates.

2023 ANNUAL SURVEY RESULTS

Transmission and gathering line operators representing nearly 85 percent of pipeline mileage responded to the 2023 Annual Survey as implementing Pipeline SMS at various stages of the journey. As distribution operators were surveyed in 2023 as part of PHMSA's Request for Information, the Team did not re-survey distribution operators to avoid survey fatigue ahead of the 2024 survey process. Without distribution operators, the 2023 results included fewer overall respondents but showed significant implementation progress throughout 2023 compared with previous results, including:

↑+13%

increase in operators' leadership demonstrating commitment

↑+16%

increase in gap analysis conducted

↑+13%

increase in operators closing gaps in 1-2 or 2-5 years; 6% decrease in gaps closed in 5-10 years

↑+21%

increase in operator's implementation 'on track' or 'faster than planned'; 14% decrease in 'stalled for the moment'

↑+14%

increase in operators establishing management review & conducting at least 1 review

↑+22%

increase in operators maintaining method to evaluate maturity

↑+16%

increase in operators assessing safety culture since 2020

TOP 5 ELEMENTS OPERATORS ARE FOCUSED ON IMPLEMENTING

1. Management Review & Continuous Improvement
2. Risk Management
3. Operational Controls
4. Emergency Preparedness & Response
5. 2 tied (Incident Investigation, Evaluation & Lessons Learned and Safety Assurance)

TOP 5 HARDEST ELEMENTS TO IMPLEMENT

1. Management Review & Continuous Improvement
2. Competence, Awareness & Training
3. Documentation & Record Keeping
4. Stakeholder Engagement
5. 2 tied (Risk Management & Operational Controls)

OPERATORS HIGHLIGHT LEADING PRACTICES ON CONDUCTING MANAGEMENT REVIEWS & UTILIZING OUTPUTS

Operators described how they established an internal management review process and conducted at least one management review, as well as what they did with the outputs.

“ We have integrated multiple internal reviews including review of our annual risk results, changes to our O&M manual, annual review our IMP programs, AIP metrics review, into an annual SMS calendar that streamlines reviews to the appropriate level.”

“ The element leads for Management Review and Continuous Improvement facilitate quarterly reviews, with the first one conducted in 2018. Elements not meeting KPIs or needing additional focus are on the agenda each quarter. Action items from Quarterly Management Reviews are published on the company’s SharePoint site and are part of the PSMS KPI dashboard.”

“ We have established a Technical Governance Committee, including senior leaders, that meets quarterly to review the SMS progress, provide feedback, and approve SMS activities. Feedback from the Management Review is evaluated and implemented or planned for implementation in the next iteration of our SMS Implementation Plan as appropriate.”

“ Our company revised how we conduct our internal management review process. A report, whose template is structured around 11.1.2, is compiled and distributed to management and top management. Top management signs off on the report. The outputs of the report are used to form the goals of the Pipeline SMS the following year.”

“ We made the decision to move from the suggested annual management review to quarterly management reviews with element owners and Executive staff members. KPI health for all elements are reviewed and action tasks are identified to check and adjust where needed.”

“ We established quarterly Sub-Element Management Review meetings between Sub-Element Owners and their Sponsors. 1Q is progress to plan, 2Q is planning from assurance activities, 3Q is initial maturity assessment, 4Q is current year annual review, including finalizing maturity ratings and targets, and planning for the following year. The information gathered from the 4Q sub-element management reviews is rolled up to be presented during OMS Annual Management Review to determine the adequacy and effectiveness of our system. The output includes meeting minutes for each quarterly and the OMS Annual, as well as our OMS Report and OMS Plan which are published yearly in March.”

IN THEIR OWN WORDS - OPERATOR TESTIMONIALS

“ We are in the middle of a paradigm shift from seeing a management system as a file cabinet of processes/procedures, to a living organism that connects the elements and breathes through the PDCA cycle using data as a critical nutrient. This means we have spent a lot of time reorganizing what we already have into something new and discussing how to roll it out as a new concept that will resonate with our employees. The challenge has been keeping it simple since it is a very complex organism.”

“ We have focused on stakeholder engagement opportunities and established a strategy to meet with each operating region bi-annually. This provides us with an in-person opportunity to not only raise awareness of the SMS and SMS processes but to also receive input and feedback from the workforce. This also serves as a method to identify risks that are experienced by the workforce, those who have firsthand knowledge and experience. In 2023, we have seen positive engagement from executive leadership to understand human and organizational performance and non-punitive reviews.”

“ Our company promotes the concept of shared risk - everyone has a role to play in preventing a risk from occurring or reducing the consequences of the risk should it occur. We conduct shared risk meetings at both the leadership and process levels. Meeting attendees at the process level consist of subject matter experts, process leaders, frontline employees, and key stakeholders. The presence of the employees closest to the work creates a safe space to share chronic unease and identify opportunities for improvement. The dialogue held during the meetings occasionally results in the realization of how the work of one group may unknowingly impact another. Collaboration to resolve these newly identified gaps supports a strong safety culture.”

“ PSMS implementation helped to support a renewed emphasis on a contractor safety mentorship program. This is a robust mentoring program with major contractors where company personnel are assigned to liaise with the contractors for the purpose of providing guidance and expectations, sharing learnings and to help facilitate the continuous improvement of contractors' own HSE performance and management programs.”

“ Helps tie everything together from day-to-day activities to higher level strategy and decision making. Helps explain the 'Why' to all employees. Furthermore, the assessment process has begun to provide an opportunity for our front-line workers to see their contributions and feedback translate to continuous improvement.”

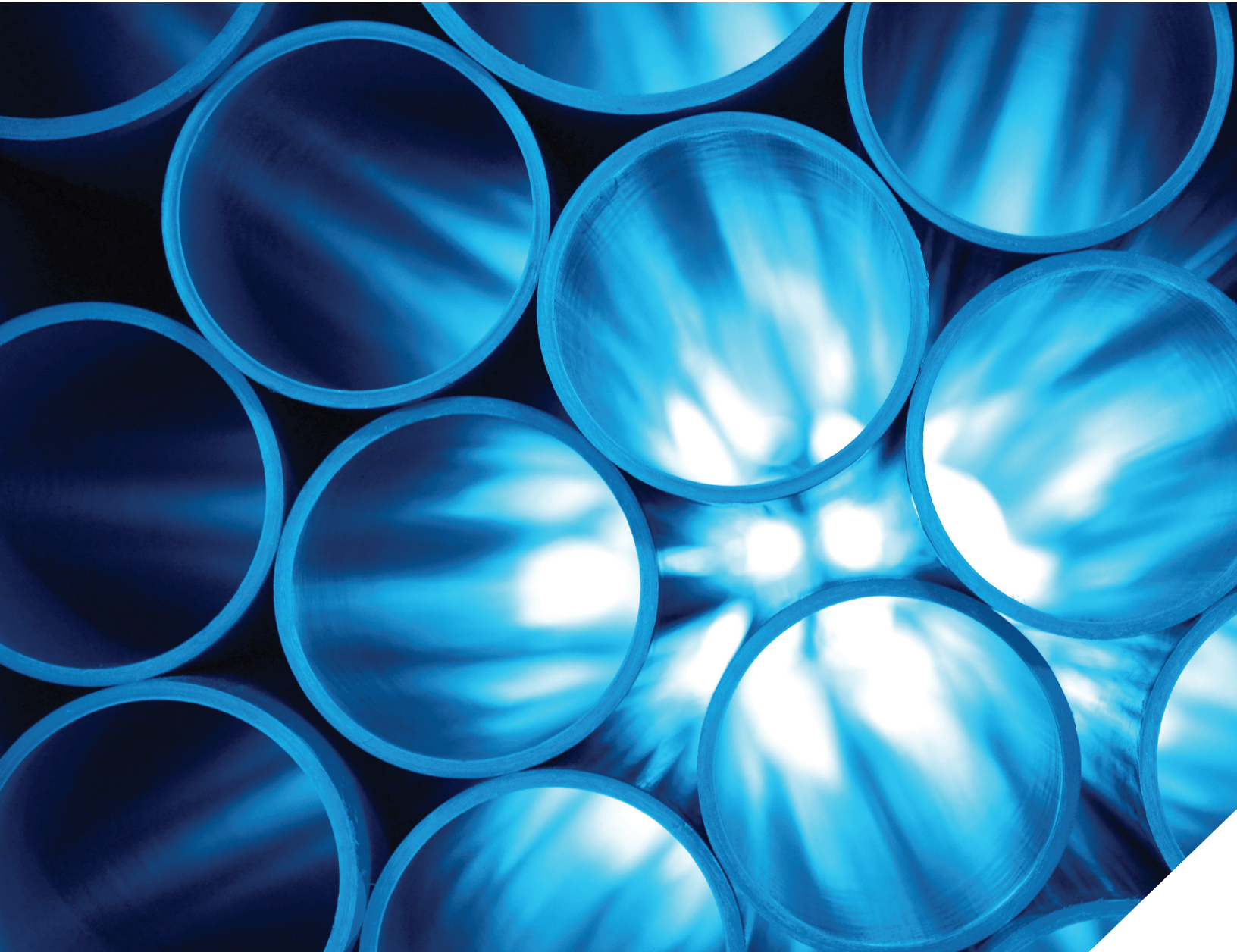
“ One of our most successful projects has been creating a formal abnormal operating conditions (AOC) investigation process that allows all reported events to be investigated and tracked to resolution. This process has ensured that all reported events are thoroughly evaluated and gives our Operators confidence their concerns will be addressed.”

“ It has made most understand that there is more to safety than hard hats and steel toes. Safety culture has and continues to improve.”



2024 FOCUS AREAS AND KEY ACTIVITIES

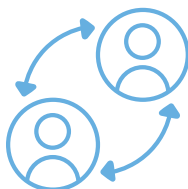
In 2024, the PSMS Industry Team will maintain its four main focus areas: increasing industry participation, ensuring stakeholder engagement, supporting operator and contractor journeys and providing governance and oversight as well as work on the key activities as follows:





INCREASE INDUSTRY PARTICIPATION

- Conduct 2024 Annual Survey with pipeline operators and contractors
- Develop annex for very small operators to demonstrate flexibility and scalability in RP 1173, second edition



ENGAGE STAKEHOLDERS

- Finalize, publish, and begin implementing RP 1185, *Pipeline Public Engagement*, to improve public and community engagement programs for transmission assets throughout the pipeline's lifecycle
- Publish the 2023 Annual Report and engage regulator and public stakeholders
- Engage PHMSA regarding gas distribution study and advisory bulletin encouraging implementation recommended by NTSB
- Socialize contractor guidance, training material and assessment program with appropriate target audiences



SUPPORT OPERATOR AND CONTRACTOR JOURNEYS

- Host a workshop analyzing safety culture survey learnings and socialize leading practices
- Encourage contractors to participate in 2024 safety culture survey, with distribution operators survey planned for 2025
- Finalize and publish Pipeline SMS training (CBT) for field personnel and contractors
- Perform PSMS sessions at 2024 Pipeline Conference to highlight leading practices
- Continue to conduct operator assessments and updating the industry benchmarking report as appropriate
- Conduct contractor assessment pilots, with the goal to publish API Pipeline SMS Contractor Assessment Program



ENSURE GOVERNANCE AND OVERSIGHT

- Continue revisions to RP 1173, first edition with a targeted publication date of 2025 for the second edition
- Transition to incoming Chair and Vice Chair, including inaugural Chair from contractor community



Pipeline SMS



American
Petroleum
Institute



American Public
Gas Association



API

200 Massachusetts Avenue NW, Suite 1100

Washington, DC 20001

202-682-8000

www.PipelineSMS.org

PipelineSMS@api.org