



Welcome to the GTI / NGA Pipeline Safety Management (PSMS) eLearning Series

Why is this PSMS eLearning important to me?

This program covers the development and implementation of API RP 1173 including an introduction to the ten core elements of API RP 1173. The goal of this program is to not only educate, but also to instill a sense of operational ownership in pipeline safety.

As you embark on your eLearning journey please focus on how this information can be leveraged to assist you in tying PSMS principles into your day-to-day activities.

What other PSMS tools are available?

NGA operates a PSMS Collaborative among 19 of its members. Members of the Collaborative and Blacksmith, working in conjunction with SGA have developed tools designed for field supervisors, crew leads, and field personnel—those on the front line of pipeline safety. Tactical Guides, Quick Tips, and Technical Guidelines were crafted to seamlessly integrate the elements and principles of API 1173 into daily decision-making and actions. These tools can be accessed here in the PSMS Resource Center at ngapsms.com.

How do I begin my journey?

Below, you will find the list of available eLearning modules, including their descriptions, beginning with an introductory video.

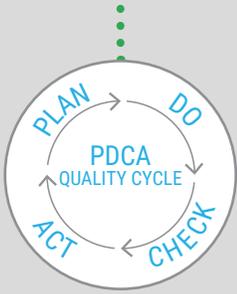
Access to the the eLearning modules are granted in sequential order:

1. Introductory Video
2. Series 1 Modules
3. Series 2 Modules

Upon completion of all courses, participants will receive a certificate of completion from NGA and GTI Energy. GTI awards 4 PHDs (professional development hours) or .4 CEUs (continuing education units) when we can verify the courses were successfully completed.

Thank you!

We trust that the material provided will assist you in safeguarding pipeline, personal and public safety. Taking this eLearning series is an important component of your organizations PSMS program. Thank you for your participation.



PIPELINE SAFETY MANAGEMENT SYSTEM (PSMS) LEARNING SERIES



NGA, GTI and Operations Technology Development joined efforts to align the vision, messaging and implementation for the PSMS Learning Series. These efforts included sharing content and materials in development, determining key strategies for success and leveraging NGA PSMS Tactical Guides referenced in the PSMS Learning Series. Each course is an interactive eLearning experience that will help operationalize PSMS by providing a foundation to the PSMS elements, journey, commitment and engagement. The target audience spans leadership teams, engineers, front line supervisors and all levels of construction, operations and maintenance technicians.

SERIES 1

Course 1

Introduction to American Petroleum Institute (API) Recommend Practice (RP) 1173 PSMS

In this course, you will increase your understanding of safety management systems and learn the high-level framework for organizations that operate hazardous liquids and gas pipelines jurisdictional to the U.S. Department of Transportation.

Target audience: Natural gas utility employees

This course covers:

- What is a safety management system?
- Why a pipeline SMS?
- RP 1173 framework for pipeline SMS
- Benefits of a pipeline SMS

Course 2

Overview of American Petroleum Institute (API) Recommend Practice (RP) 1173 PSMS Essential Elements

In this course, you will grow your understanding of the 10 essential elements for an effective pipeline safety management system and learn about common pipeline organizations activities, processes and programs associated with this topic.

Target audience: Natural gas utility employees

This course covers:

- RP 1173 framework for pipeline SMS
- What are the Essential Elements?
- The importance of essential elements to pipeline SMS

Course 3

Introduction to the PSMS Journey

In this course, you will learn about the maturity levels pipeline organizations experience and common industry tools developed to support each stage of their pipeline safety management systems journey.

Target audience: Natural gas utility employees

This course covers:

- How to get started
- Measuring system maturity
- Common support tools designed for and by the pipeline industry
- Safety culture's connection in sustainability

Course 4

The Importance of Safety Culture

In this course, you will learn about what safety culture means in a PSMS, it's importance to PSMS, and what a positive safety culture looks like in an organization.

Target audience: Natural gas utility employees

This course covers:

- Safety culture in a PSMS
- Importance of safety culture
- Key traits of a positive safety culture

Course 5

Contractor Engagement for the Operator

In this course, you will increase your understanding on the requirements pipeline operators have for engaging their contractors, why contractor involvement in PSMS is so important, and some support tools on this topic.

Target audience: Natural gas utility employees

This course covers:

- An operator's PSMS responsibilities to its contractors
- Importance of contractor PSMS engagement
- Contractor PSMS support tools

Course 6

Contractor Engagement for Pipeline Contractors

In this course, you will increase your understanding of safety management systems, why contractor involvement in PSMS is so important, and some support tools on this topic.

Target audience: External contractors who work for natural gas utilities

This course covers:

- What is a safety management system?
- Importance of contractor PSMS engagement
- Contractor PSMS support tools

CONTACT US TODAY FOR MORE INFORMATION

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Course 1

Leadership and Management Commitment

In this course, you will increase your understanding of the roles and types of leadership within a PSMS, the importance of Leadership Commitment, and how Leadership Commitment advances pipeline safety.

Target audience: Natural gas utility employees

This course covers:

- Who provides leadership in a PSMS?
- The role of employees in PSMS
- Impact of Leadership Commitment on Safety Culture

Course 2

Stakeholder Engagement

In this course, you will increase your understanding of engagement with internal and external stakeholders in meeting the requirements of a PSMS. In addition, you will learn how you and your fellow employees play a crucial role in stakeholder engagement.

Target audience: Natural gas utility employees

This course covers:

- What is the role of leadership in stakeholder engagement?
- Internal and External stakeholders
- How stakeholder engagement relates to Public Awareness
- The role Field Employees in external engagement

Course 3

Risk Management

In this course, you will increase your understanding of risk management and the goals of driving down risk and achieving zero incidents. You will learn how you and your fellow employees play a key role in risk management.

Target audience: Natural gas utility employees

This course covers:

- Role of leadership in Risk Management
- How field employees play a role in Risk Management
- How non-field employee play a role in Risk Management

Course 4

Operational Controls

In this course, you will increase your understanding of operational controls and their critical role in a PSMS. You will see how your use of procedures and work practices matters within your organization and why they are essential types of operational controls. In addition, you will learn how you and your fellow employees play a crucial role in applying operational controls.

Target audience: Natural gas utility employees

This course covers:

- What are Operational Controls?
- What are Operating Procedures per RPI 1773?
- The role of procedures for field employees
- What is System Integrity per RPI 1173?
- What is Management of Change?
- Use of Contractors

Course 5

Incident Investigation, Evaluation, and Lessons Learned

In this course, you will learn about the importance of maintaining procedures for investigating incidents and near-misses that led, or could have led, to an incident with serious consequences.

Target audience: Natural gas utility employees

This course covers:

- Procedures surrounding incident investigation
- Evaluation of findings from incident and near-misses
- Applying lessons learned to the PSMS

Course 6

Safety Assurance

In this course, you will increase your understanding of Safety Assurance and its critical role in a PSMS. You will see how your use of audits, evaluations, and related work practices, like key performance indicators (KPIs), measures the effectiveness of risk management and the adequacy of the PSMS. You will also learn how Safety Assurance is a crucial component in the Plan-Do-Check-Act Improvement Cycle.

Target audience: Natural gas utility employees

This course covers:

- What is Safety Assurance?
- Auditing PSMS Conformance
- PSMS Maturity and Benchmarking
- Tracking Audit and Evaluation Findings
- Defined reporting in a healthy PSMS
- Use of Key Performance Metrics
- Plan-Do-Check-Act Cycle

Course 7

Management Review and Continuous Improvement

This course will increase your understanding of Management Review and its vital role in a Pipeline Safety Management System (PSMS). You will learn how management reviews are used to evaluate the achievement of performance goals and objectives.

Target audience: Natural gas utility employees

This course covers:

- PSMS management review process

- Status and effectiveness of corrective actions
- Performance measures and KPIs
- Incorporating results of PSMS reviews, feedback, audits, and lessons learned
- Why Continuous Improvement needs Management Review

Course 8

Emergency Preparedness & Response

In this course, you will increase your understanding of emergency preparation and response and how its role fits with the overall Pipeline Safety Management System (PSMS).

Target audience: Natural gas utility employees

This course covers:

- Planning and Preparation for Emergencies
- Potential Types of Emergencies
- Internal and External Notification Requirements
- Incident Command Structure
- Safety, Health, and Environmental Protection Procedures
- Communication Plan
- Conducting Training and Drills
- Updating the Emergency Plan

Course 9

Competence, Awareness, & Training

In this course, you will understand the importance of having all personnel within the scope of the PSMS to have an appropriate level of competence in terms of education, knowledge, and experience.

Target audience: Natural gas utility employees

This course covers:

- Importance of training for internal and external stakeholders
- Communicating newly emerging risks
- Opportunities to improve processes or procedures
- Potential consequences of failure to follow processes or procedures

Course 10

Documentation and Record Keeping

In this course, you will learn the importance of maintaining a procedure for the identification, distribution, and control of documents required by the PSMS.

Target audience: Natural gas utility employees

This course covers:

- Responsibilities for document review and approval
- Removal of obsolete documents
- Making sure that documents are readily available to workers performing an activity
- Record retention