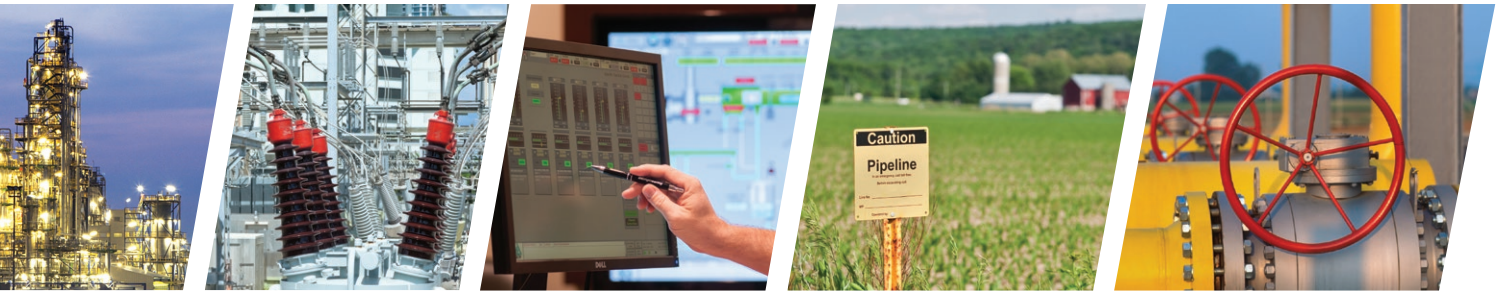


# API 1173 – Pipeline Safety Management Systems



## Introduction

Pipeline safety incidents are not typically caused by one single deficiency; they are usually the result of multiple deficiencies, and the interaction between these deficiencies. Recently, the National Transportation Safety Board (NTSB) recommended the development of a safety management system standard specific to the pipeline industry.

## Overview

“Pipeline Safety Management Systems” (Recommended Practice API 1173) provides a framework for managing pipeline safety holistically through the integration of various activities including risk and asset management, formal processes and procedures, systematic decision making, monitoring of program effectiveness, safety culture, audits, and increased communications. It builds upon and goes beyond current pipeline safety programs by promoting continuous improvement through a formal “Plan–Do–Check–Act” cycle.

## Services

EN Engineering professionals are uniquely qualified to provide the guidance and technical expertise to implement pipeline safety management systems. Our Integrity Management and Process Safety Management consultants work with clients to develop comprehensive pipeline safety management programs, or to build upon/implement specific aspects of existing programs.



Graphic courtesy of the American Petroleum Institute

### **Comprehensive Program Development**

- Assess existing processes and procedures to determine how they address pipeline safety and how the operator is currently addressing each element of the Recommended Practice through review and gap analysis of:
  - Content of operating procedures
  - Threat and risk management
  - Responsibility, accountability, authority
- Partner with client to develop and implement the program, including:
  - Project management
  - Assess safety culture
  - Facilitate stakeholder meetings
  - Establish key performance indicators

### **Support for Existing Programs**

- Develop new operating procedures
- Revise existing operating procedures
- Identify system risk
- Improve data quality through data mining or field noting
- Perform periodic audits of the PSMS as recommended by API 1173
- Provide training for new or revised procedures

### **Complementary Services**

- Develop Process Safety Management program
- Provide Process Hazard Analysis (HAZWOP, What-if, etc.)
- Provide data compilation and updating (PSI)