



BULL. 1178



Pipeline SMS

DATA MANAGEMENT AND INTEGRATION GUIDELINE

A Pipeline Safety Management System

To purchase this suite of standards or individual Integrity standards, visit the API publications store at techstreet.com/api

Significance of New Document

The bulletin provides a catalogue of tactics for integrating data used in integrity management. Recognizing there are many and that any one scheme for data integration, let alone the entirety of it, may not be appropriate or applicable, simple reviews of possible approaches for operators, given their specific circumstances, are considered. There is particular focus on the methodologies and processes used to spatially integrate and normalize in-line inspection (ILI) data, since it is most used by operators in their integrity management programs. API Bulletin 1178 also discusses general data quality processes, goals, and considerations, understanding that poor data inputs equal bad outputs. Additionally, guidance is given detailing the core objective of a data management system, achieving the highest degree of data quality possible for the intended purpose, while also doing the following:

- Promoting the efficient use of resources
- Providing easier access to critical information for qualified employees
- Ensuring that data is protected and preserved in accordance with business, legal, and policy requirements

- Communicating with other systems using a common frame of reference for broader analysis capabilities
- In the document, text can be found regarding the significant challenge of capturing and quantifying subject matter expert (SME) knowledge, which is often lost when the SME leaves his or her current role

Integrity Best Practices Working Together

- API Bulletin 1178 provides instruction on data integration that will supplement other API pipeline integrity documents, specifically API RP 1160, Managing System Integrity for Hazardous Liquid Pipelines for Integrity Management.
- The suite of API documents working together will give companies practical guidance on instituting a holistic approach to integrity management programs that ensure safe assets.

The Audience for API Bull. 1178 Includes

Owners/operators, engineering service providers, and others involved in integrating data for integrity management.

The Impact of Implementing API Bulletin 1178

With industry willing to implement the guidance in API Bulletin (Bull.) 1178, the challenges in managing pipeline integrity data, which is a fairly well understood but manual process and involves numerous spreadsheets and disparate databases, will now have a solution. Implementation will allow for the following and ultimately, greater pipeline safety:

- Improved auditing and traceability of the data
- Improved tracking of data corrections
- Improved safeguards against human error
- Improved resource utilization
- Improved data security
- Improved scalability

Stakeholders Collaborating to Improve Safety

API documents standardize and disseminate best practices across the industry

- Developed via open, accredited processes, with formal review and comment periods;
- Provide all operators with the benefits of the industry's combined expertise in critical areas; and
- Once adopted and implemented, establishes standard practices across the industry.

The Energy Pipeline Industry is Committed to Improving the Safety of America's Pipeline System

- **Research**
 - Advancing state-of-the-art technology for managing and mining pipeline integrity data
- **Collaboration**
 - Merging company data sets to understand industry trends
- **Measurement**
 - Tracking industry results to understand program effectiveness and appraise industry implementation



*America's Pipeline Industry:
Focused on Zero Incidents, Committed to Continuous Improvement*