




## Standards Resource & Research Request (SR<sup>3</sup>) Form Pipeline Standards

### Document Information

Standard Designation:	Publication 1178							
Title:	Integrity Data Management and Integration							
Edition:	2							
Budget Year:	2023							
Committee/Subcommittee/Group: (check all that apply if a joint project)	SMS VG	<input type="checkbox"/>	Public Awareness & Engagement VG	<input type="checkbox"/>	Cybernetics VG	<input type="checkbox"/>	Operator Qualifications VG	<input type="checkbox"/>
	Pipeline Integrity VG	<input checked="" type="checkbox"/>	Emergency Response VG	<input type="checkbox"/>	Construction & Operations VG	<input type="checkbox"/>	Underground Storage VG	<input type="checkbox"/>
	Gathering Lines VG	<input type="checkbox"/>	Environment, Health & Safety VG	<input type="checkbox"/>	COPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priority Matrix Ranking: (to be completed by API Staff)	<input type="checkbox"/>	Priority 1 (Rank 10-15)	<input checked="" type="checkbox"/>	Priority 2 (Rank 7-9)	<input type="checkbox"/>	Priority 3 (Rank ≤6)		
UN Sustainable Development Goal (to be completed by API Staff)	<input type="checkbox"/>	#7 Access to Energy	<input type="checkbox"/>	#8 Economic Growth	<input checked="" type="checkbox"/>	#9 Resilient Infrastructure	<input type="checkbox"/>	Other
API Energy Excellence Program (to be completed by API Staff)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No				
Proposed Action:	<input type="checkbox"/>	New Standard			<input checked="" type="checkbox"/>	Revise Current Standard		
	<input type="checkbox"/>	Withdraw Current Standard			<input type="checkbox"/>	Research Only		
Proposed Funding Type:	<input type="checkbox"/>	Budget Request			<input type="checkbox"/>	Special Solicitation		
Total Funding Request (Parts A & B):	<input type="checkbox"/>	\$	20,000					
Name of Submitter(s):	John Bufflod							
Date:	3 November 2022							

### Part A – Resource Plan

#### I. Background and Information:

1. Explain the business need for the proposed action. Indicate potential cost savings to industry where possible.

API Bulletin 1178, Integrity Data Management and Integration, is a document which provides guidance to operators and vendors on the management of integrity inspection data. Recently, the federal pipeline regulations were updated to reflect integrity data management, and 1178 should be updated to reflect the new federal regulation. The liquid pipeline regulations are below, but similar language was also included in 49 CFR 192.

The primary driver would be 195.452 (g) (shown below, in part):

**What is an information analysis?** In periodically evaluating the integrity of each pipeline segment (see [paragraph \(j\)](#) of this section), an operator must analyze all available information about the integrity of its entire pipeline and the consequences of a possible failure along the pipeline. Operators must continue to comply with the data integration elements specified in [§ 195.452\(g\)](#) that were in



## Standards Resource & Research Request (SR<sup>3</sup>) Form Pipeline Standards

effect on October 1, 2018, until October 1, 2022. Operators must begin to integrate all the data elements specified in this section starting October 1, 2020, with all attributes integrated by October 1, 2022.

**2. What is the scope of the standard?**

This publication provides a compendium of methodologies and considerations for integrating the underlying data used to support integrity management. Any one approach, let alone the entirety of the document, may not be appropriate or applicable in all circumstances. The document reviews possible approaches for consideration by operators in the context of their specific circumstances.

The primary focus of this publication is the methodologies and processes used to spatially integrate and normalize the data to support the application of comparative techniques used in interpreting integrity data, with particular emphasis on in-line inspection (ILI) data. The document begins with a discussion of general data-quality processes, goals, and considerations such that data quality approaches can be considered in the context of the data integration processes. An impediment to informed integrity decisions is the inability to efficiently review a broad spectrum of data in a format that has been normalized and spatially aligned. With the variations in organizational structures, integrity management programs, and technologies used across the pipeline sector, individual operators design data integration procedures that are customized to their organizational structure, processes, and pipeline systems.

Properly managed and integrated data support agile analytics to integrate new data as they become available and to recognize coincident events and patterns. The data source may be from within an organization, or may be external to the company, as in the case of representative data based on industry experience or manufacturing processes. The intent is to empower operators to efficiently analyze and integrate threat- and integrity-related data to support their integrity management programs.

**3. Is this standard on the work program of another standards development organization (SDO)?**

Yes  No

If yes, specify SDO and standard designation/project title/contact

If yes, is the work being coordinated with the appropriate group? Are there special circumstances that would justify independent API initiation of the proposed action?

**4. Are a volunteer chair and group of experts available to perform the proposed action?**

Please include names and company affiliation and indicate chair, if available.

Bruce Dupuis will be the lead contractor. The 1<sup>st</sup> edition 1178 group will be reconstituted; it had 20 members on the team. We will reach out to the various participants in API's integrity standards groups for further volunteers.

**5. Is there a need to commit resources to supplement the development of the draft? Would a paid content specialist accelerate progress on the development/revision? Is there a readily available content specialist?**

Yes. We intend to contract Bruce Dupuis, the chair and primary author of the 1<sup>st</sup> Edition, to revise the document and lead task group discussions.



## Standards Resource & Research Request (SR<sup>3</sup>) Form Pipeline Standards

6. Are there special format requirements for final document, i.e. knowledge of ISO template required), significant graphics, photos or equations) required that would need extraordinary resources?

Yes  No

If Yes, please provide details:

7. Please provide any other information that is pertinent to the proposed action.

The current plan for this revision is to contract w/ Mr. Dupuis to revise 1178 to align it with current US federal regulation and update the text. We will then provide this draft to the task group for review and discussion. When the team is satisfied with the revised document, it will be sent out for ballot and comment review. We hope to publish the revised document in 2023.

8. What are the implications of not initiating the proposed action? Include potential safety, reliability, environmental and financial impacts that may arise.

We hope to align the publication with federal regulation to assist operators in meeting their regulatory requirements.

9. Is there research proposed to accomplish the proposed action?

Yes  No

If yes, complete Part B of this form.

### II. Project Timing

Proposed start date:	January 2023	Proposed date draft will be ready for letter ballot:	April 2023
TG/WG: (estimated number of volunteers needed)	20	Content Management: (\$ amount "if needed" or volunteer)	\$20,000

## PART B – Research Plan

### I. Background and Information

1. Proposed Research Title:

2. Proposed Project Scope:

3. Research Amount:

\$

4. What is the business need for the proposed research?



File Name:

## Standards Resource & Research Request (SR<sup>3</sup>) Form Pipeline Standards

5. Is the proposed research edition-specific for a single standard or will it result in technology enhancement for multiple standards?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

If multiple standards, please cite the standards effected:

6. Research Timing:

Research is necessary prior to scheduled revision.

Research can be done concurrent with revision.

7. How does the research support the proposed action identified in Part A?

8. Is a joint industry project (JIP) a possibility?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

If Yes, with whom?

9. Are there opportunities for leveraged research with other organizations?

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

What organizations?

10. What are the implications of not performing the proposed research?

### II. Dates and Funding:

Estimated Completion Date	Prior Research Funding Requested	Anticipated Future Research Funding Needs					
		Year 2: \$		Year 3: \$		Year 4: \$	
	\$						

### PART C – Proposal Feedback/Approval Information

For API Use ONLY

COPS comments to Proposer/WG:	<input type="text"/>
Date approved by COPS:	<input type="text"/>
Date entered into API Publications DB:	<input type="text"/>