

| Construction Safety & Quality |
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| Consensus Guideline Creation, |
| Review, and Approval Process |

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| Document | Revision | Date |
| CSQ-G-1 | 1 | May 2023 |

1.0. ACTIVITY DESCRIPTION

- 1.1. The purpose of this document is to describe how the INGAA Foundation and its Membership develops and disseminates basic safety and quality guidelines that support common natural gas pipeline construction and maintenance activities.
- 1.2. The safety and quality guidelines, a.k.a. CSQG, published by INGAA Foundation are not meant to supersede or replace regulatory requirements, nor are they intended to be all-inclusive of the applicable contractor/owner company quality-related protocols or regulatory requirements. Instead, the guidelines are intended to reflect industry-wide consensus and be supportive and complementary to the aforementioned sources.

2.0. PURPOSE AND APPLICABILITY

- 2.1. The INGAA Foundation Safety and Quality & Integrity Standing Committees has a history of interest in stimulating enhanced safety and quality performance throughout the industry. The primary mission of the Committees is to lead the volunteer efforts of INGAA Foundation membership to develop comprehensive safety and quality guidelines for common construction and maintenance activities.
- 2.2. Mission Statement: To create industry consensus guidelines for pipeline construction safety and quality that both pipeline owner/operators and pipeline service providers can align with and adopt as their own.
- 2.3. The Scope of Work for each project should communicate safety and quality expectations, applicable guidelines and procedures, and specify how safety and performance quality will be managed throughout the project.

3.0. ROLES AND RESPONSIBILITIES

3.1. INGAA Foundation (Staff) Responsibilities

- 3.1.1. Final review, concurrence, and endorsement of newly issued consensus guidelines.
- 3.1.2. Dissemination and publication of the guideline documents.
- 3.1.3. Maintain the library of published construction safety and quality consensus guidelines (CSQG) in a manner that is easily accessible to INGAA Foundation Members and with the broader public access when deemed appropriate.



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- 3.1.4. Coordinate periodic reviews and updates, as appropriate, of published guideline documents.
- 3.1.5. Support formation and activities of the Safety and Quality & Integrity committees, including but not limited to, forwarding communications regarding INGAA Foundation membership recommendations on topics for future CSQG and collaboration with the Committees to prioritize the order of guideline development.

3.2. Safety and Quality & Integrity Committees Responsibilities

- 3.2.1. Propose topics for development into consensus guidelines, considering requests from INGAA Membership, current events within the industry and opportunities to enhance safety and/or quality performance.
- 3.2.2. Lead efforts to develop a comprehensive collection of construction safety/quality consensus guidelines. This includes (as applicable and appropriate) drafting guidelines, distribution of review drafts for comment and addressing review comments.
- 3.2.3. Advising INGAA Foundation Members on current practices, recommending adjustments to common procedures and estimating probable effects if the adjustments are adopted.

3.3. INGAA Foundation Membership Responsibilities

- 3.3.1. Nominate new topics for future construction safety/quality consensus guidelines that will stimulate improvement in the safety/quality performance of common pipeline construction activities.
- 3.3.2. Contribute topic-specific materials representing current practices and procedures.
- 3.3.3. Volunteer to participate with the Committees in the development of guidelines, on a topic-specific basis.
- 3.3.4. Review and provide consensus approval, approval with comments, or rejection of the Committee approved draft guidelines.
- 3.3.5. Adopt the consensus guidelines by integrating the described practices and procedures into their company procedures and work plans, as applicable and appropriate.



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4.0. BACKGROUND AND HISTORY

- 4.1. In 2009, INGAA sponsored a workshop to identify three major "construction safety intervention" strategies which would require an industry-wide commitment to be successful. One of the strategies implemented following the workshop is to develop construction safety consensus guidelines.
- 4.2. In 2010, a workgroup of the Safety Committee designed a process to guide the development of consensus guidelines. Refer to "INGAA Construction Safety Consensus Guidance Development" (July 2011, final report) for additional information.
- 4.3. Since then, several Construction Safety and Quality Consensus Guideline documents have been developed with the continued support of the Safety and Quality & Integrity Committees and the volunteer efforts of other INGAA Foundation Members.

5.0. APPROACH AND METHODOLOGY

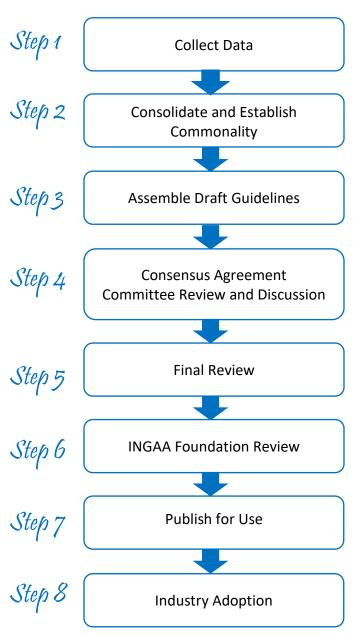
- 5.1. The safety and quality guidelines will be:
 - Reflective of industry consensus practices.
 - Guidance on relevant safety and/or quality topics that impact pipeline construction activities.
 - Published by INGAA Foundation (e.g., posted to INGAA Foundation website).
- 5.2. Contributors to the guideline development process and end-user groups:
 - INGAA Foundation Members.
 - Pipeline Owners/Operators and Service Providers
 - Health & Safety Professionals.
 - Quality Professionals.
 - Construction Personnel.



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5.3. Overview of Consensus Guidelines Development Process



Collect a representative sample of current industry practices.

Examples: email request for material, workshop or focus group session.

Summarize elements of collected material. Highlight common aspects.

Identify any new features to recommend.

Write a draft guidelines document describing common aspects and recommended enhancements.

Include recommended topics (see Section 5.4), or variations per Committee.

Build consensus on content through review and comment on the draft.

Edit draft based on review comments.

Committee determines appropriate distribution for review of revised draft guideline document. Address review comments, assemble proposed quidelines and submit to INGAA Foundation.

Identify any language or elements that conflict with the foundation's mission and/or guiding principles.

Following concurrence between INGAA
Foundation and Committee, guidelines are
published or otherwise distributed to INGAA
Foundation Membership.

Industry-wide adoption involves comparing current company procedures with the published guidelines and making fine-tune adjustments to align with the guidance.



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- 5.4. Contents of Consensus Guideline Documents
 - 5.4.1. Topics recommended to include in construction safety consensus guidelines:
 - **Activity Description** Basic description of the scope, purpose, applicability and context regarding regulatory requirements.
 - **Hazard Assessment** Specific and limited to the topic in the guideline document.
 - Roles and Responsibilities Management (including all with Supervisory roles), Health & Safety personnel, Employees, and Visitors (if applicable).
 - Equipment and Supplies Equipment or supplies that are specific to the scope of work or necessary to complete the activity described in the guidance document may be included if they present a specific condition or hazard to the employee(s) or environment.
 - Hazard Mitigation Subsections will vary for each topic/guideline document.
 - **Training** Specific and limited to the topic in the guideline document.
 - References Recommend adding a statement to acknowledge updates to the listed references (e.g., "Current versions of the references automatically supersede the references listed below.").
 - History of Revision.
 - 5.4.2. Topics recommended to include in construction quality consensus guidelines:
 - **Activity Description** Basic description of the scope and context regarding regulatory or other requirements.
 - **Purpose and Applicability** Benefits and guidance on how and when to apply the concepts presented.
 - Roles and Responsibilities Management (including all with Supervisory roles), Quality (QA/QC) personnel, Employees, and Visitors (if applicable).
 - Definitions and Acronyms Recommend excluding commonly used words or acronyms.



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- **Approach and Methodology** Subsections will vary for each topic/guideline document. Recommend including procedures, activities, measurements, and equipment that contribute to or impact quality.
- Training Specific and limited to the topic in the guideline document.
- References Recommend adding a statement to acknowledge updates to the listed references (e.g., "Current versions of the references automatically supersede the references listed below.").
- History of Revision.
- 5.4.3. Reference other Construction Safety/Quality Consensus Guidelines, rather than repeating the overlapping information.
- 5.4.4. Document Control Procedures
- 5.4.5. As a general practice, each consensus guideline document is numbered for identification and labeling purposes.
- 5.4.6. A 3-field numbering system is used.
 - The first field identifies the document as being part of the collection of consensus guidelines and differentiates between safety guidelines (i.e., CS-) and quality guidelines (i.e., CQ-).
 - The second field is used to group guidelines into topic-related categories, for example:
 - G General Guidelines
 - H Industrial Hygiene-Related Guidelines
 - S Activity-Based Safety Guidelines
 - Q Activity-Based Quality Guidelines
 - M Materials-Related Quality Guidelines
 - R Right-of-Way Guidelines
 - The third field is a number.
- 5.4.7. Revision numbers are used to track changes or updates made to a document and to be sure that the most recent versions are available for use.



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6.0. TRAINING AND QUALIFICATIONS

6.1. Familiarity with the process and guidelines presented in this document are recommended for anyone participating in the development of Construction Safety or Quality Consensus Guidelines.

7.0. REFERENCES

Current versions of the references automatically supersede those listed below.

- 7.1. INGAA Foundation
 - 7.1.1. INGAA Construction Safety Consensus Guidance Development, Final Report, July 2011
 - 7.1.2. Guidelines Available to Download: https://ingaa.org/category/foundation/guidelines/

8.0. HISTORY OF REVISIONS

| Revision | Date | Description | |
|----------|-----------|---------------------------------------------|--|
| 0 | 2/24/2020 | Initial Issue | |
| 1 | 5/8/2023 | General updates to template and terminology | |