

**2ND Integrity
Management Workshop
for Natural Gas
Transmission Pipelines**

Sponsored by the INGAA Foundation
and the American Gas Association

Design of the Workshop

- Education on Integrity Management
 - The Goal of Integrity Management
 - Proposed Rule
 - National Consensus Standards
 - Present Industry Practices
- Understand Positions concerning Proposed Rule
 - Industry (Panel)
 - OPS (Panel)
 - States (Audience)
 - Service Providers (Audience)
- Information on How You can Make a Difference
 - How to file comments on proposed rule
 - Contacts involved in the development of rule

Workshop Materials

- Agenda
- Notes and Bios of Speakers
- Pipeline Safety Act of 2001
- Final Definition of High Consequence Area
- Proposed Pipeline Integrity Rule
- Instructions for filing comments on proposed rule
- Important national consensus standards and how to obtain them

What this Workshop is Not

- A Complaint Session
 - But “Constructive” Comments and Criticism are Welcome
- An Implementation Workshop
 - Remember Implementation will be Discussed at Future Workshops when the Proposed Rule is Finalized
- A Place to Market Goods and Services
 - But Everybody is Going to Need Some Help with Implementing this Proposed Rule and You Need to Know Your Options and Sources of Help and Expertise

Something To Think About

$$\text{HCA} = f(\text{D}, \text{P}, \text{CL}, \text{IS}, \text{MRA}, \text{PIZ}, \text{PIC}, \text{TR}, \text{PIR})$$

Upcoming Forums to Learn More

- Feb. 26, AGA/MEA/NGA/SGA/WEI Audio Conference Call.
- Mar. 26-27, SGA/AGA Integrity Workshop, Charlotte, NC
- OPS TPSSC Meeting Washington DC
- Apr. 16-17, MEA/AGA Integrity Workshop, Colorado Springs, CO.
- Apr. 16-17, SGA/AGA Integrity Workshop, Oklahoma City, OK.
- Apr. 28-29, AGA Operations Conf. & Exhibit, Orlando, FL
- ??? INGAA Foundation Integrity Implementation Meeting

Upcoming Forums to Learn More, Cont.

More Information on Forums:

- AGA, www.aga.org look for upcoming events.
- INGAA, www.ingaa.org
- MEA, www.midwestenergy.org
- SGA, www.southerngas.org
- WEI, www.powerin.org

Identifying Issues and Commenting on the NPRM

- Best Resource: Get involved with your respective national trade association.
- AGA has a pipeline integrity task group in place.
- APGA working closely with AGA.
- INGAA has Pipeline Safety Committee with various task groups addressing specific issues.

Draft Comments will be available for
customization

Goal is Safe Pipelines (Healthy Forest)

- Improve Pipeline Safety
 - (Grow Straight and Strong Tree Trunks)
- Focus your Resources on the True Issues
 - (Avoid Crooked and Heavy Side Limbs)
- Eliminate Inefficient Practices and Regulations
 - (Prune Dead Wood)
- Prevent Duplicative Safety Efforts
 - (Avoid Trunks that Split in Two)
- Assure the Public that the Pipeline System is Safe
 - (Prove the Forest is Healthy)

What is Integrity Management and how did we get here? (1920-1969)

- Individual companies started building pipelines and developed their individual integrity practices based on other industry practices and practical knowledge
- Companies worked together and came up with a set of industry integrity standards. This industry standard was eventually titled ASME B31.8.
- Eventually, this standard became a national consensus standard for managing the integrity of natural gas transmission pipelines.
- Pipeline companies still utilized other additional integrity practices that they developed

The Pipeline Industry (Forest) is Made Up of Many Different Pipelines (Trees)



What is integrity management and how did we get here? (1970-1990)

- After Congress passed the pipeline safety law in 1968, the DOT developed a set of regulations that adopted many of the components of ASME B31.8 and added some additional requirements.
- Individual companies developed practices that were above and beyond what was required in the Federal pipeline safety regulations. Some of these practices are documented in the Gas Piping Technology Guide and in ASME B31.8. Many of the integrity practices were jointly developed with other companies, but some were individually developed and implemented.
- Pipeline integrity was a two level effort, monitoring what you did to satisfy the federal pipeline safety regulations and doing what was necessary to maintain the integrity of the pipeline system.

The Pipeline Safety Regulations Mandated that the Base Integrity Plan be the Same



What is integrity management and how did we get here? (1990-1997)

- Pipeline companies reviewed their integrity practices and determined that some of the practices could be improved. It was determined that some of the regulations were not effective and wasteful when combined with new integrity management techniques.
- The Office of Pipeline Safety began to review other industry's practices including risk management practices mandated by OSHA and EPA.
- OPS tested risk management techniques during the Risk Management Demonstration Program and looked in depth at pipeline integrity practices during the System Integrity Inspection Program
- OPS announced that they were going to begin development of a new pipeline integrity for high consequence areas and they started work on hazardous liquid pipelines.

Risk Management Focused Resources (Pruning) to Achieve Safety Goals (Strong and Straight)



What is integrity management and how did we get here? (1997-2001)

- INGAA in concert with GRI began an extensive review of the basis behind the industry's integrity practices. Much of this information was documented in individual company experiences and the research conducted by PRCI and was documented by the “yellow pages”.
- A series of research reports were developed to form the basis of the new ASME B31.8S addendum that detailed a new consensus integrity standard that augments the present ASME B31.8.
- OPS issued a set of performance based pipeline integrity regulations that were based on the API Recommended Practice that covered areas of high consequence for hazardous liquid pipeline including high population density areas and unusually environmentally sensitive areas.
- Additional national consensus standards that are referenced in B31.8S were developed or are in the process of development by groups such as NACE and ASNT.
- The Congress of the United States passed the Pipeline Safety Act 2001 mandating that additional integrity inspections occur in high consequence areas.

Focus on High Consequence Areas
(One Side Branch) may not Improve
Pipeline Safety Goals (Straight and
Tall Trees)

