

Background and Historical Review of API 1160 Managing System Integrity For Hazardous Liquid Pipelines

Benny Mumme 2012 API Pipeline Conference April 17-2012



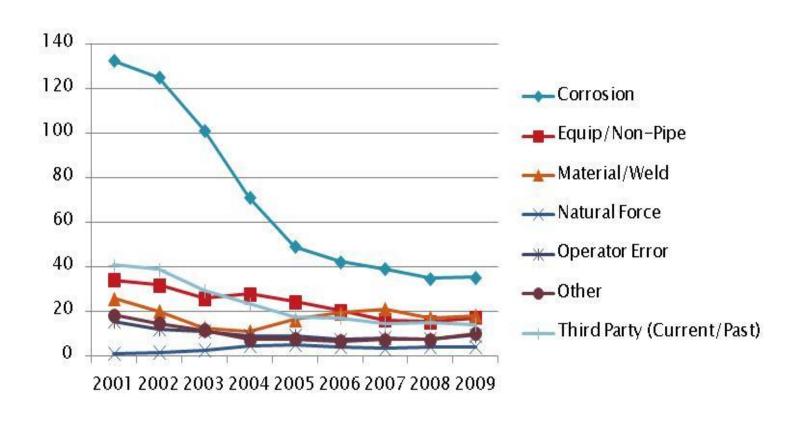
- The RULE Code of Federal Regulations -195.452 Pipeline Integrity Management in High Consequence Areas – effective May 29, 2001
 - Purpose of these requirements is to enhance and validate pipeline integrity
- API Standard 1160 First Edition November 2001 - Managing System Integrity For Hazardous Liquid Pipelines



- Liquid Pipeline Operators developed Integrity Management Plans and have been applying and adjusting them for each of their systems 2001 to the present
- Increased focus and resources to pipeline risk assessment, data integration, understanding threats, preventive and mitigation programs
- Measurable reduction in pipeline releases in the last ten years



Results - Reduction of releases





- Industry Learning
 - Data Integration
 - Multiple data sets
 - In line inspection development
 - Combination tools
 - Resolution and accuracy improvements
 - Crack tool development
 - Many other guiding document developed or updated such as
 - API 2611 Terminal Piping Inspection
 - API 1162 Public Awareness Program for Pipeline Operators
 - API 1163 Second Addition In-Line Inspection of Liquid Pipelines.



- Revision and Updating
 - API Pipeline Integrity Work Group started Late
 2008 Team of Liquid Pipeline Integrity
 Professionals
 - Contract bids Hired Dr. Kiefner 2009 to update
 API 1160 with support of SME for the various
 sections of the document



Currently completed the comment review.
 Positioned to send out for ballet. Should be published in 2nd quarter 2012

- What it is today? Recommended Practice
 - Pipeline Integrity guidance document
 - Road Map to the many other Industry Integrity
 Management documents