



§ 192.607 VERIFICATION OF MATERIAL PROPERTIES & ATTRIBUTES

*Asset Integrity & Corrosion
Knowledge, Skills, & Ability Series*



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What's New?

On October 1, 2019, the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final rule to the Federal Register, Safety of Gas Transmission Pipelines: Maximum Allowable Operating Pressure Reconfirmation, Expansion of Assessment Requirements and Other Related Amendments. This rule is commonly referred to as the Gas Transmission Pipeline "Mega Rule", Part 1.

The Mega Rule, 192.624, requires operators to address gas transmission pipeline Maximum Allowable Operating Pressure (MAOP) record gaps where information is missing or incomplete. Operators may collect this information over time, when a pipeline segment is exposed for maintenance or repairs. Material verification program sampling requirements include:

1. § 192.607 (e)(2) Operator must complete the following number of excavations:
 - a. One per mile or
 - b. 150 excavations if the population is more than 150 miles
2. § 192.607 (e)(4) Expanded Sampling Program when test results are not consistent with expectations:
 - a. Address sampling expansion to address findings
 - Why are results inconsistent
 - Size of inconsistent population
 - b. Designed to establish a 95% confidence level
 - Inconsistency a "one-off" or representative of a bigger issue?
 - What is the (probable) population size
3. § 102.607 (e)(5) Alternate Sampling Plan:
 - a. Alternate statistical sampling approach that differs from (e)(2)
 - b. Valid statistical basis to achieve 95% material property confidence level
 - c. Justify "valid statistical basis"

MAOP reconfirmation methods may include:

1. Pressure test and TVC record development (material verification)
2. Pressure reduction
3. § 192.632 Engineering Critical Assessment
4. Pipe replacement

How Will These Changes Impact Me?

Operators are required to develop a MAOP reconfirmation plan/procedure effective July 1, 2021. Effective July 3, 2028, operators are required to complete a minimum of 50% of their pipeline/component reconfirmations, with 100% of all MAOP reconfirmations completed by July 2, 2035.

How Can We Help?

Audubon maintains a highly qualified and experienced staff with over 20 years of regulatory compliance and integrity management experience. We offer 192.607 compliant material verification sampling plans and field material verification services to support your MAOP validation program. Our subject matter experts are committed to maintaining safe and reliable operations of gas transmission pipelines. We help our customers comply with Federal and State pipeline safety regulations, including development, implementation and management of their pipeline integrity program.

Key Deliverables

- Identify 607 (e)(2) alternate sampling plan sample size
 - Material property delta specifications
 - Type I and II errors
- Identify sampling point of diminishing returns, while minimizing errors
- Identify population sizes and grouping
- Identify inconsistent sample results and determine to do with them
- Develop and submit 607 (e)(2) alternate sampling plan for PHMSA approval

Benefits

- Concept to completion, risk-based, integrated approach
- Compliance with applicable regulatory requirements

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