Natural Gas Transmission Mega Rule Assessment: Know Where You Stand

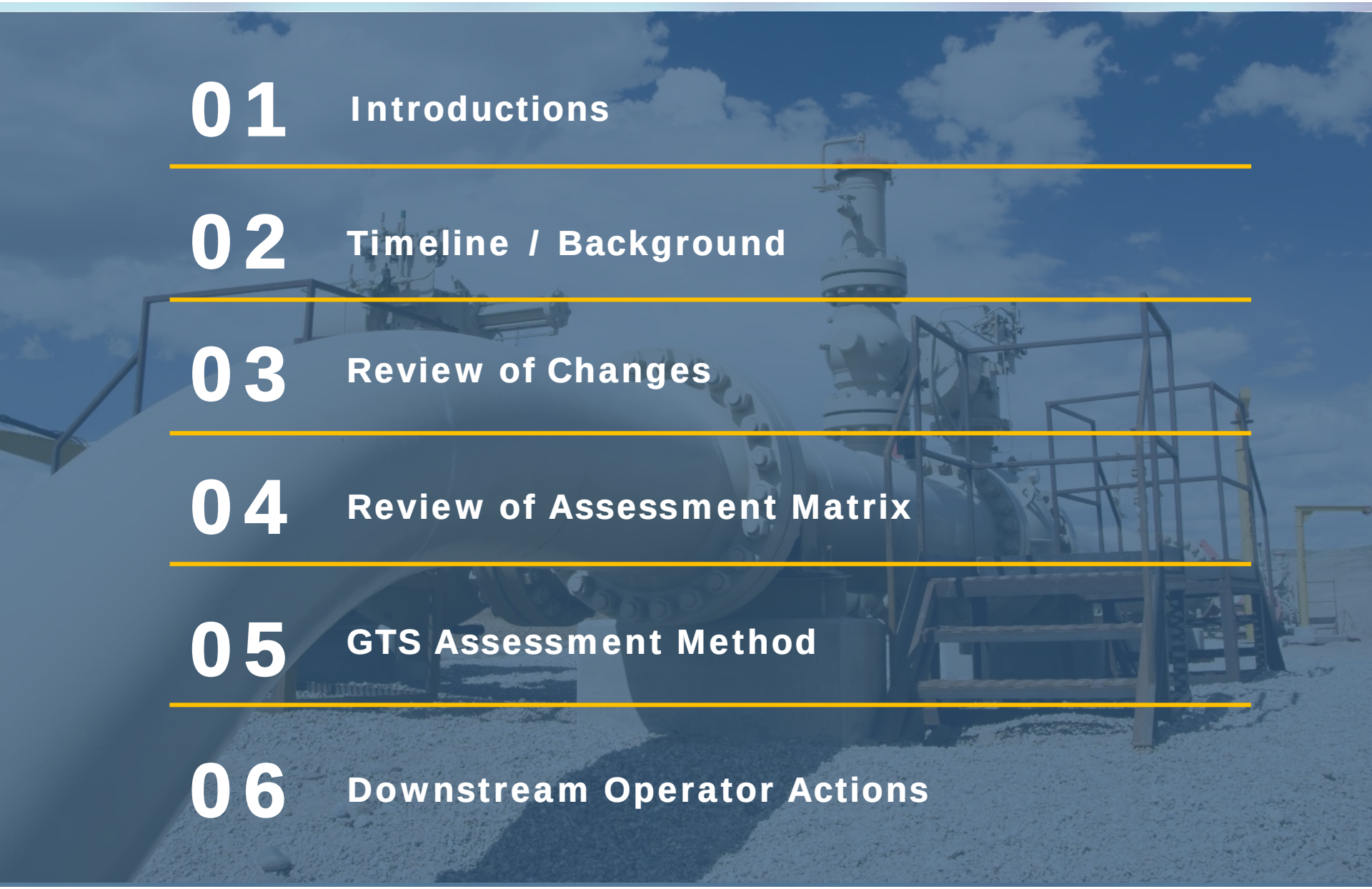
Northeast GAS ASSOCIATION

October 8, 2020

GTS

Crafting Solutions for the Natural Gas Industry

Agenda



01 Introductions

02 Timeline / Background

03 Review of Changes

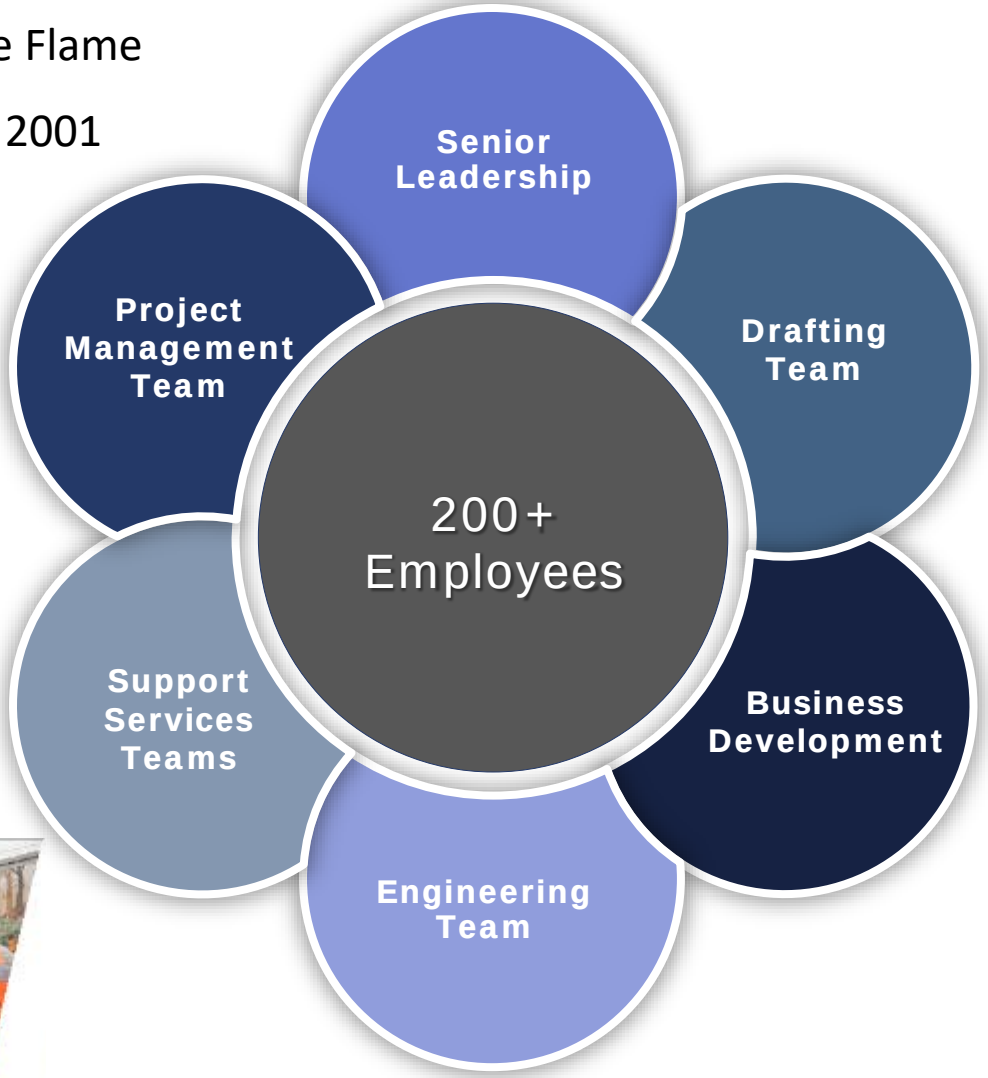
04 Review of Assessment Matrix

05 GTS Assessment Method

06 Downstream Operator Actions

GTS Overview

- Founded in 1998 under the name of Blue Flame
- Incorporated in the State of California in 2001
- Office locations:
  - Atlanta, GA
  - Walnut Creek, CA
  - Los Angeles, CA
  - Phoenix, AZ
  - Chico, CA
- Serve clients nationally – most recently CA, GA, FL, VA, IL, AZ, TN, NC, KY, CO, TX, MI, IN, PA, WV, NY



GTS Presentation Team

Tyler Enos

Business Area Lead – Transmission Pipeline

Tyler is experienced in the areas of pipeline replacement engineering, ILI retrofitting, valve automation, strength test design, and station design. Tyler, is a licensed Engineer in the State of California and has over seven (7) years of engineering design experience on a wide range of projects. Tyler has managed a team of engineers through the design and engineering of over 200 miles of strength tests. He also managed a team of engineers through the completion of the Pipeline Safety Enhancement Plan updated work paper filing.

Jessica Sheldon

Business Area Lead – Asset Knowledge

Jessica has over 9 years of experience in the Asset Knowledge realm. From her experience building features lists to leading teams of over 70 engineers on all aspects of Asset Knowledge. Jessica works with clients to develop, establish, and maintain MAOP reconfirmation programs via establishment of asset and work management systems as well as creation of processes and procedures. Jessica has experience setting client's up for full compliance with all code requirements and creating solutions as part of the operator's 15-year plan.

Background

Regulatory Change History

Parts 191 & 192

- 1968: Natural Gas Pipeline Safety Act
- 1970: 49CFR, Part 192
- 1988: 2009
  - o Drug & Alcohol Testing
  - o Excess Flow Valves
  - o One-call Systems
  - o TIMP
  - o DIMP
- **2010: San Bruno Incident**
- 2011: Pipeline Safety, Regulatory Certainty, and Job Creation Act
- 2019: Mega Rule, Part 1

PHMSA Mega Rule – 3 Parts Summary

Issued 10/1/19

Part 1

- MAOP Determination & Reconfirmation
- Material Verification
- Engineering Critical Assessment (ECA)
- Definition of TVC
- Records management
- Identification & assessment of MCA
- Analysis of Predicted Failure Pressure
- Assessment intervals & methods
- Revisions to policies, procedures, plans

Anticipated

Part 2

- Updated & new repair criteria
- Inspection of pipelines following extreme weather events
- Updates to corrosion control requirements
- Risk assessment requirements
- Management of change (MOC)
- Definition of Transmission Line & Distribution Center

Anticipated

Part 3

- New requirements for gas gathering pipelines

49CFR Mega Rule Part 1

Part 1: Issued October 1, 2019

Mega Rule Part 1: Addressed Congressional Mandates

- MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments

Focused Areas:

- MAOP Reconfirmation & Material Verification
- Known as the 15-Year Plan

Significant Rule Part #1 Timeline	
Rule Effective Date:	July 1, 2020
MAOP Reconfirmation & MV Plan:	July 1, 2021
50% of MAOP Reconfirmation:	July 3, 2028
100% MAOP Reconfirmation:	July 2, 2035

When is the Rule Effective?

PHMSA issued **new enforcement date** for the Mega Rule Part I in response to the President's declaration of a National Emergency due to COVID-19. July 1, 2020 is still when the rule is effective.

PHMSA Notice of Stay of Enforcement **Issued on April 22, 2020**	• Temporarily suspending enforcement of the new Part 192 requirements
	• **Does NOT** apply to Part 191 reporting requirements & subsequent compliance deadlines for developing additional procedures or implementing other requirements

Part 1 New Enforcement Date:
December 31, 2020

Acrobat Document

Rulemaking 1 - October 1, 2019

Part 191 — 2 changes – regarding Reporting of MAOP Exceedances

Part 192 — 30 changes – from definitions to assessment intervals

Some Major Impacts

1 — Reporting Related
§191.23, §191.25- MAOP Exceedance Reporting
§192.18- Alternative Notices for Compliance – 6 total changes

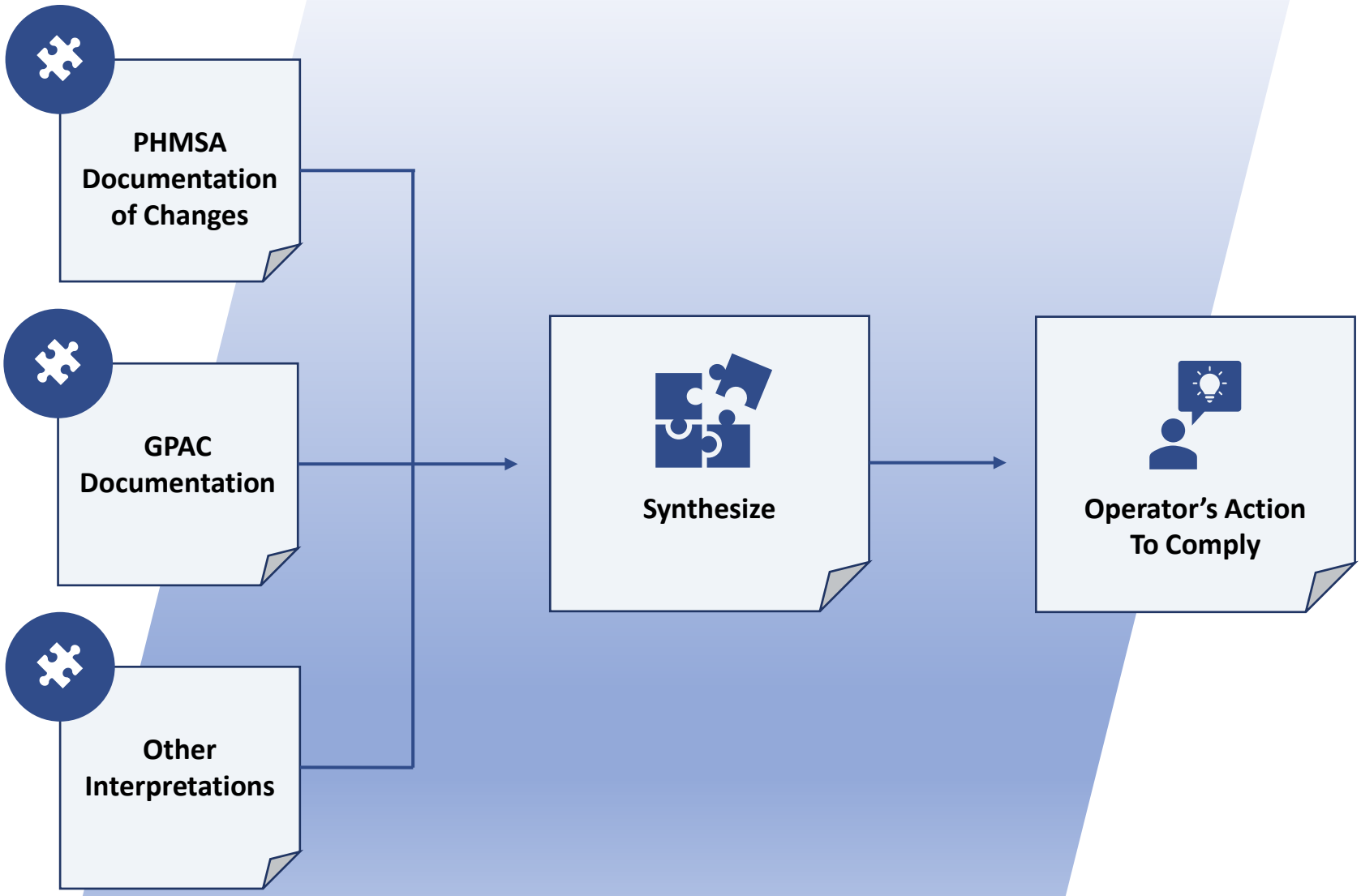
2 — Recordkeeping
§192.5, §192.67, §192.127, §192.205, §192.517 Class Location, Design Calcs, Materials, Welding – 11 total changes

3 — MAOP Related
§192.624, §192.619 §192.607- MAOP Reconfirmation, Material Verification, Pressure Testing – 5 total changes

4 — Assessment Related
§192.710: Class 3, 4 & MCAs
§192.917, §192.923: Threat Evaluation and Assessment Methods – 15 total changes

GTS Method & Tool: Compliance Assessment Matrix

Required Actions

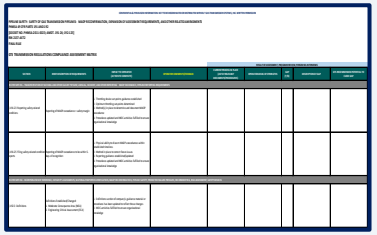


Gap Analysis

PHMSA Documentation of Changes

GPAC Documentation

Other Interpretations/ FAQs



GTS Gas Transmission Regulations Compliance Assessment Matrix™

- Identification of Guidance & Performance Gaps
- Recommendations for Action

Assisting Operator with compliance actions

- Development of 15-year compliance plan
- MAOP reconfirmation
- Material verification program establishment
- And more…

GTS Assessment Matrix – Snapshot

PIPELINE SAFETY: SAFETY OF GAS TRANSMISSION PIPELINES: MAOP RECONFIRMATION, EXPANSION OF ASSESSMENT REQUIREMENTS, AND OTHER RELATED AMENDMENTS
PHMSA 49 CFR PARTS 191 AND 192
[DOCKET NO. PHMSA-2011-0023; AMDT. 191-26; 192-125]
RIN 2137-AE72
FINAL RULE

GTS TRANSMISSION REGULATIONS COMPLIANCE ASSESSMENT MATRIX

				RESULT OF ASSESSMENT, PROGRAM REVIEW, PERSONNEL INTERVIEWS				
SECTION	BRIEF DESCRIPTION OF REQUIREMENTS	IMPACT TO OPERATOR (ACTION TO COMPLETE)	OPERATOR'S COMMENTS/FEEDBACK	CURRENT PROCESS IN PLACE (LIST OF RELEVANT DOCUMENTS/PROCEDURES)	OPERATOR AREAS OF STRENGTHS	GAP (Y/N)	DESCRIPTION OF GAP	GTS RECOMMENDED POTENTIAL TO CLOSE GAP
49 CFR PART 191 – TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE; ANNUAL, INCIDENT, AND OTHER REPORTING: MAOP EXCEEDANCE, PIPELINE REPORTING REQUIREMENTS								
§ 191.23 Reporting safety-related conditions	Reporting of MAOP exceedance > safety margin	1. Throttling device set-points guidance established 2. Optimum throttling set-points determined 3. Method(s) in place to determine and document MAOP exceedance 4. Procedures updated and MOC activities fulfilled to ensure organizational knowledge						
§ 191.25 Filing safety-related condition reports	Reporting of MAOP exceedance to be within 5-days of recognition	1. Physical ability to discern MAOP exceedances within established timelines 2. Method in place to correct future issues 3. Reporting guidance established/updated 4. Procedures updated and MOC activities fulfilled to ensure organizational knowledge						
49 CFR PART 192 - INCORPORATION BY REFERENCE, INTEGRITY ASSESSMENTS, MATERIAL PROPERTIES VERIFICATION, MAOP RECONFIRMATION, PIPELINE SAFETY, PREDICTED FAILURE PRESSURE, RECORDKEEPING, RISK ASSESSMENT, SAFETY DEVICES								
§ 192.3 Definitions	Definitions Established/Changed: 1. Moderate Consequence Area (MCA) 2. Engineering Critical Assessment (ECA)	1. Definitions section of company's guidance material or procedures has been updated to reflect these changes 2. MOC activities fulfilled to ensure organizational knowledge						

- Example of how the assessment matrix is structured & organized
- End result: operator knows where they stand with each section of the code change

Specific Areas GTS Gap Analysis Matrix Covers

					RESULT OF ASSESSMENT, PROGRAM REVIEW, PERSONNEL INTERVIEWS					
SECTION	BRIEF DESCRIPTION OF REQUIREMENTS	IMPACT TO OPERATOR (ACTION TO COMPLETE)	EFFECTIVE DATE	"OPERATOR" COMMENTS/FEEDBACK	CURRENT PROCESS IN PLACE (LIST OF RELEVANT DOCUMENTS/PROCEDURES)	OPERATOR AREAS OF STRENGTHS	GAP (Y/N)	GAP RESOLVED (Y/N)	DESCRIPTION OF GAP	GTS RECOMMENDED POTENTIAL TO CLOSE GAP

START

Section of Code → **Description of Requirements** → **Impact to Operator** → **Effective Date**

Operator's Feedback → **Current Process in Place** → **Operator Areas of Strength** → **GAP (Y/N)**

GAP Resolved (Y/N) → **Description of GAP** → **Recommendation to close GAP**

FINISH

Why is this Helpful?

The Matrix provides an organized approach to the rule changes

Allows utilities to understand and evaluate current state

Can help break down what is a code requirement vs. recommended action

GTS Assessment Method

Program Structure

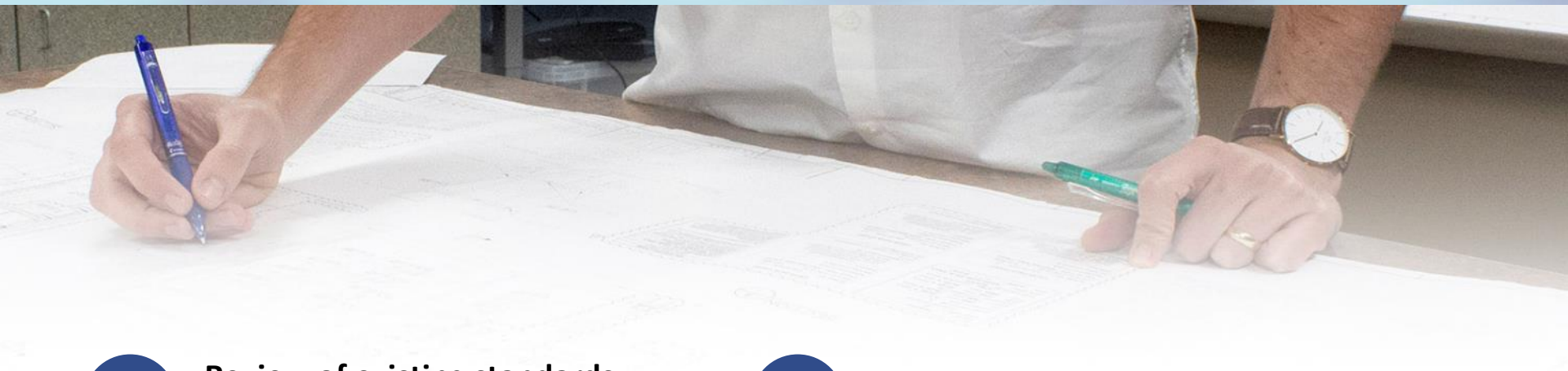
GTS will complete the review and evaluation in three stages:

Project Kickoff	Project Execution	Project Closeout
• Develop communication plan • Understand organizational structure & responsibilities • Identification of SMEs for interviews • Develop project schedule • Access to procedures, programs, standards, etc.	• Review procedures, programs, standards, etc. • Complete the Matrix & gap analysis • Conduct interviews with SMEs • Draft report and review findings with SCG for feedback • Finalize report & Assessment Matrix™	• Present findings to stakeholders • Deliver Final Report & Compliance Assessment Matrix™

GTS Gap Analysis - Deliverables

Deliverable	Description
Compliance Assessment Matrix™	• Filled out with the results from the gap analysis • Recommendations to close all gaps
Final Report	• Completed detailed report for all areas of the gap analysis: o Review of programs, standards, procedures, etc. o Results of SMEs/personnel interviews o Results of overall assessment
Presentation of Final Results	• Develop & present results/findings to stakeholders • Customize the presentation for you to communicate to your leadership, as desired

GTS Method & Approach



1. Review of existing standards, processes, and procedures
2. Complete documentation of gap analysis
3. Interview key stakeholders to current state, potential gaps and areas of improvement
4. Complete documentation/gap analysis
5. Identify recommendations, findings
6. Create findings report with recommended actions
7. Final communication

SME Interview Process

Due to Covid restrictions and depending on when we start the project, on-site interviews with SMEs might have to be conducted via online/video conferencing.

Develop Interviews List

- Develop at Project Kickoff Phase
- Identify leaders, key personnel/SME with responsibilities for functional areas

Schedule Interviews

- Coordinate & schedule of interview timeslots

On-site Interviews

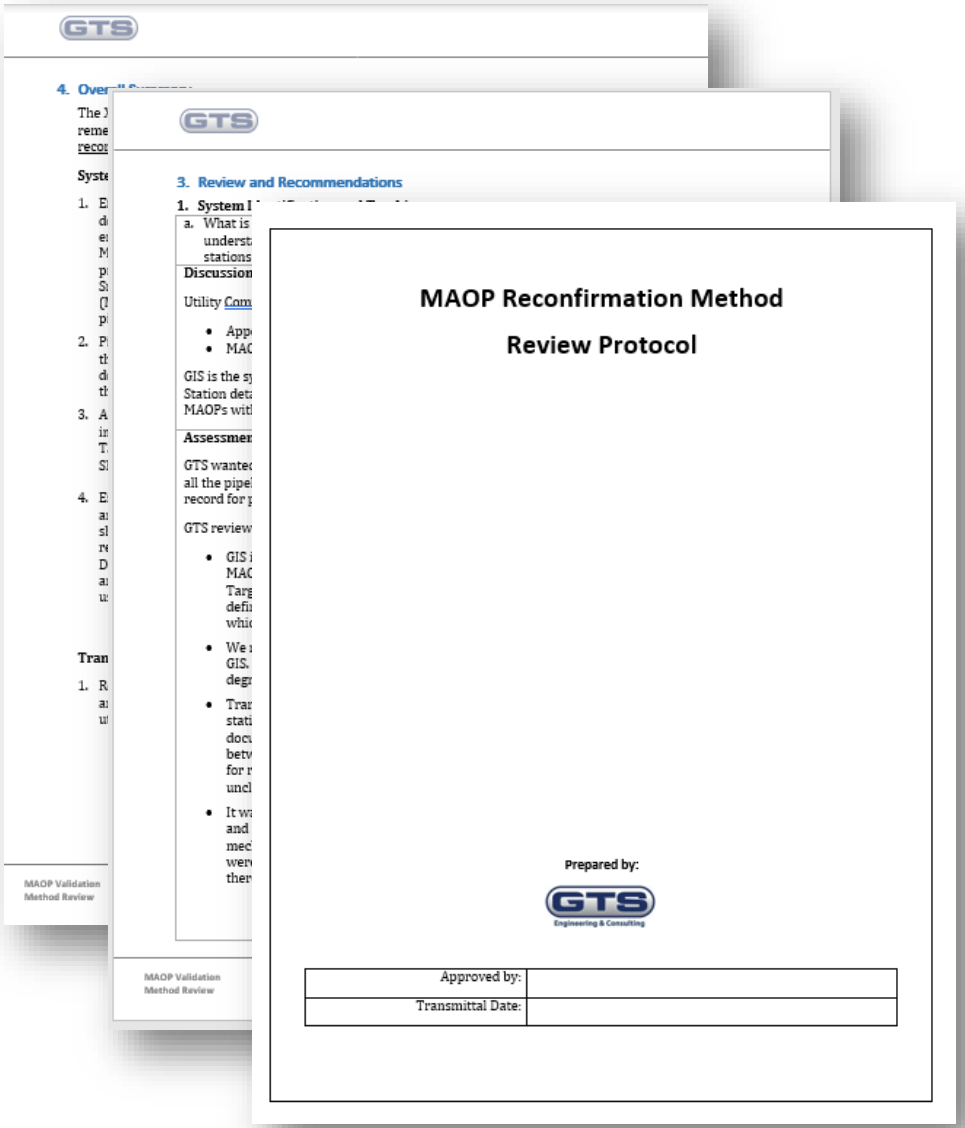
- Determine if on-site interviews will meet with company's Covid guidelines
- Identify office location(s)
- Conduct on-site interviews

Interview Notes

- Interview comments & notes will be used as part of overall assessment

Detailed look at Gap Matrix

1. Description of rule change
2. Documents reviewed for rule
3. Interview notes
4. Description of gap
5. Recommendation to close gap
6. Compliance date



Downstream Operator Actions

Recommendations & Solutions

- Updates to Engineering Standards and Procedural Manuals
- Creation of new standards, forms, processes
- Single System of Record
- Population Determination Method
- Identification of new programs; Digs PMO, MAOP Program, Material Verification
- High Level Cost Estimate for Future Programs

Detailed Recommendations

192.67 & 192.205 - Material Records - Revise the Standards Manuals for material records retention requirements for pipeline materials and pipeline components.

192.607 - Material Verification - Develop and implement a Material Verification Program to create and maintain material records wherever traceable, verifiable, and complete material records do not exist.

192.619 - MAOP Determination - Revise Test Factors per 192.619 (a)(2)(ii) - Table 1 for pipe installed after July 1st, 2020.

- Develop Station Features Lists in order to establish station MAOPs.
- Input an MAOP Calculator into a system of record

192.624 - MAOP Reconfirmation - Develop procedures in accordance with 192.624 to reconfirm MAOP according to methods 1-6 wherever required by 192.624. Procedures must be developed by July 1st, 2021.

192.632 – Engineering Critical Assessment (ECA) – Develop written procedures and protocols in compliance with this section if it is desired to establish MAOP using an ECA.

Parting Thoughts

By July 2021 MAOP Reconfirmation Procedures & Plan in place

Mega Rule Part 2 is fast approaching. It's important to begin now

PHMSA will be inspecting all these areas/ subjects beginning December 31, 2020

Let us help you get there!

Closing

1. **Comments & Questions**
2. **Next Steps & Follow-up**
3. **Contact Us**

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