

Feedback to PHMSA proposed Gas Integrity Verification flowchart from liquid pipeline industry perspective





Agenda

• In general four comments to flowchart;

- Positive comments
- Scope and process questions
- Missing key details
- Technical issues





Positive Comments

• Three choices to establish / verify MAOP

- Hydrotest with spike test
- Derate with life fatigue analysis
- Engineering Critical Assessment
- Recognizes the fact the hydrotesting is not the only method to assess pipelines
- Documentation focuses on x42 and higher pipe.
- Allows flexibility and an engineering approach





Scope and Process Questions

- Is this just to establish MAOP in absence of records verification?
- Does PHMSA want to apply this to broader Integrity Management issues? Would IMP 2.0 include this?
- Will this be a regulatory requirement? If so, what is the intended rulemaking process?
- Does PHMSA want to apply a similar process to liquid pipelines? Through what process?





Details Missing

• Key technical details missing;

- Document verification requirements
- Hydrotest requirements
- Spike test requirements
- Derating; what level of deration? Based on what operating history?
- Engineering Assessment requirements





Clarification of Terms

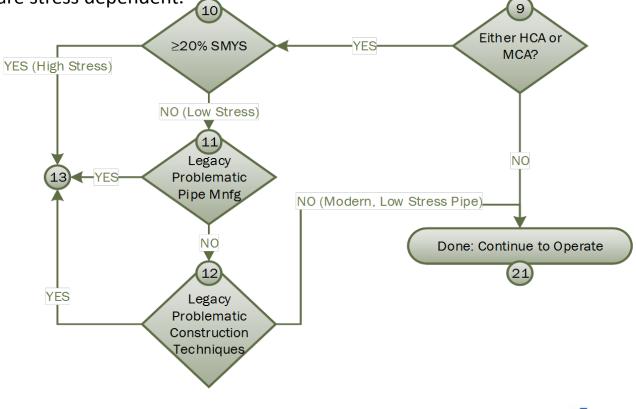
FROM PHMSA PRESENTATION

- Legacy Pipe means LFERW, SSAW, Flash Weld (AO Smith), or pipe w/ joint factor < 1 (e.g., lap welded pipe)
- *Modern Pipe* means post-code pipe not manufactured with any techniques listed under Legacy Pipe
- Legacy Problematic Construction Techniques means wrinkle bends, miter > 3 degrees, Dresser Couplings, non-standard fittings, arc welds, oxyacetylene welds, bell spigots, puddle weld repairs, etc.
- We need clear definitions of these terms
- What is legacy Problematic pipe?





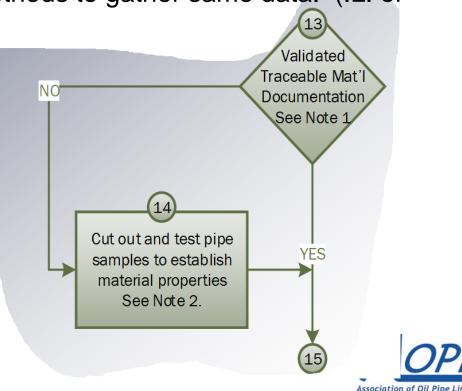
- Why emphasis on low stress (<20% SMYS)
- Current code exemptions for low stress lines are different.
- Manufacturing threats are stress dependent.





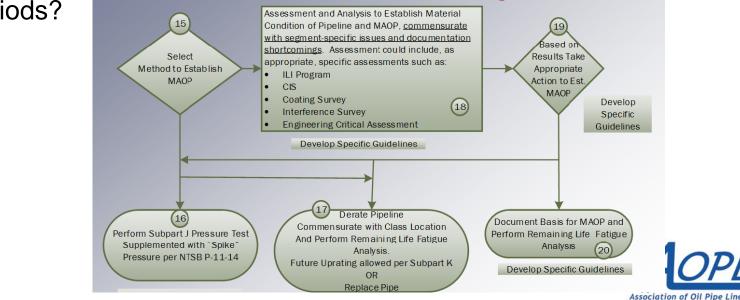


- What is definition of Validated Traceable Material Documentation? Longhorn?
- Why cut out and test requirement in all scenarios?
- May be other less destructive methods to gather same data. (ILI or in-the-ditch testing methods)
- If hydrotest or deration method is chosen, is step 14 even relevant?





- Subpart J test overly burdensome, other hydrotest methods adequate;
- Use "spike" test only where warranted or appropriate.
- Ensure compliance timeline reflects adequate time for project execution and minimizes service disruption for all assessment methods.
- How are systems expected to operate during documentation and testing periods?
 Assessment and Analysis to Establish Material Condition of Pipeline and MAOP, commensurate

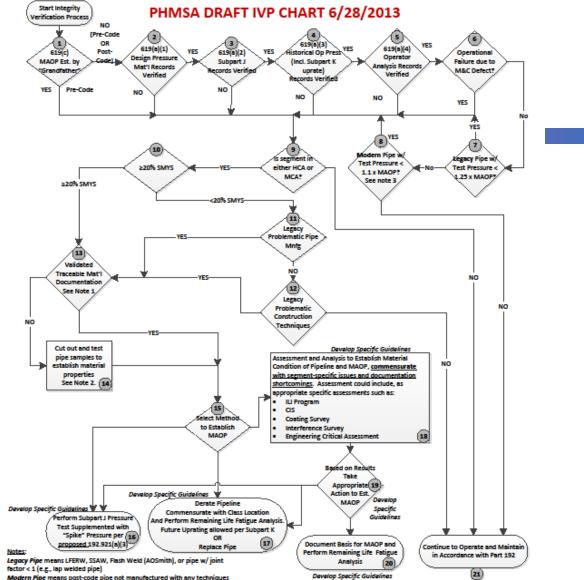




Thank you







Modern Pipe means post-code pipe not manufactured with any techniques listed under Legacy Pipe

Legacy Problematic Construction Techniques means wrinkle bends, miter > 3 degrees, Dresser Couplings, non-standard fittings, arc welds, oxyacetylene welds, bell spigots, puddle weld repairs, etc.

Moderate Consequence Area (MCA) means non-HCA pipe in Class 4, 3, 2, locations & Class 1 locations with (TBD) houses/sites in PIR.

Note 1: Required for Pipe, Valves, Flanges, Fittings, & Components Note 2: Validated mat'l properties req'd for X42 and greater & pipe \ge 2°OD if on the mainline.

Note 3: Revise 619(a) to require min. 1.25 MAOP pressure test for new pipe Note 4: Validation of MAOP per 619(d), Alt MAOP, not considered a problem and not addressed in FFS requirements

PROPOSED DEADLINES FOR COMPLETING INTEGRITY VERIFICATION						
	≥ 50% SMYS		20 - 50% SMYS		< 20% SMYS	
Location	Legacy	Modern	Legacy	Modern	Legacy	Modern
HCA	TBD	TBD	TBD	TBD	TBD	TBD
MCA Class 4	TBD	TBD	TBD	TBD	TBD	TBD
MCA Class 3	TBD	TBD	TBD	TBD	TBD	TBD
MCA Class 2	TBD	TBD	TBD	TBD	TBD	TBD
MCA Class 1	TBD	TBD	TBD	TBD	TBD	TBD

