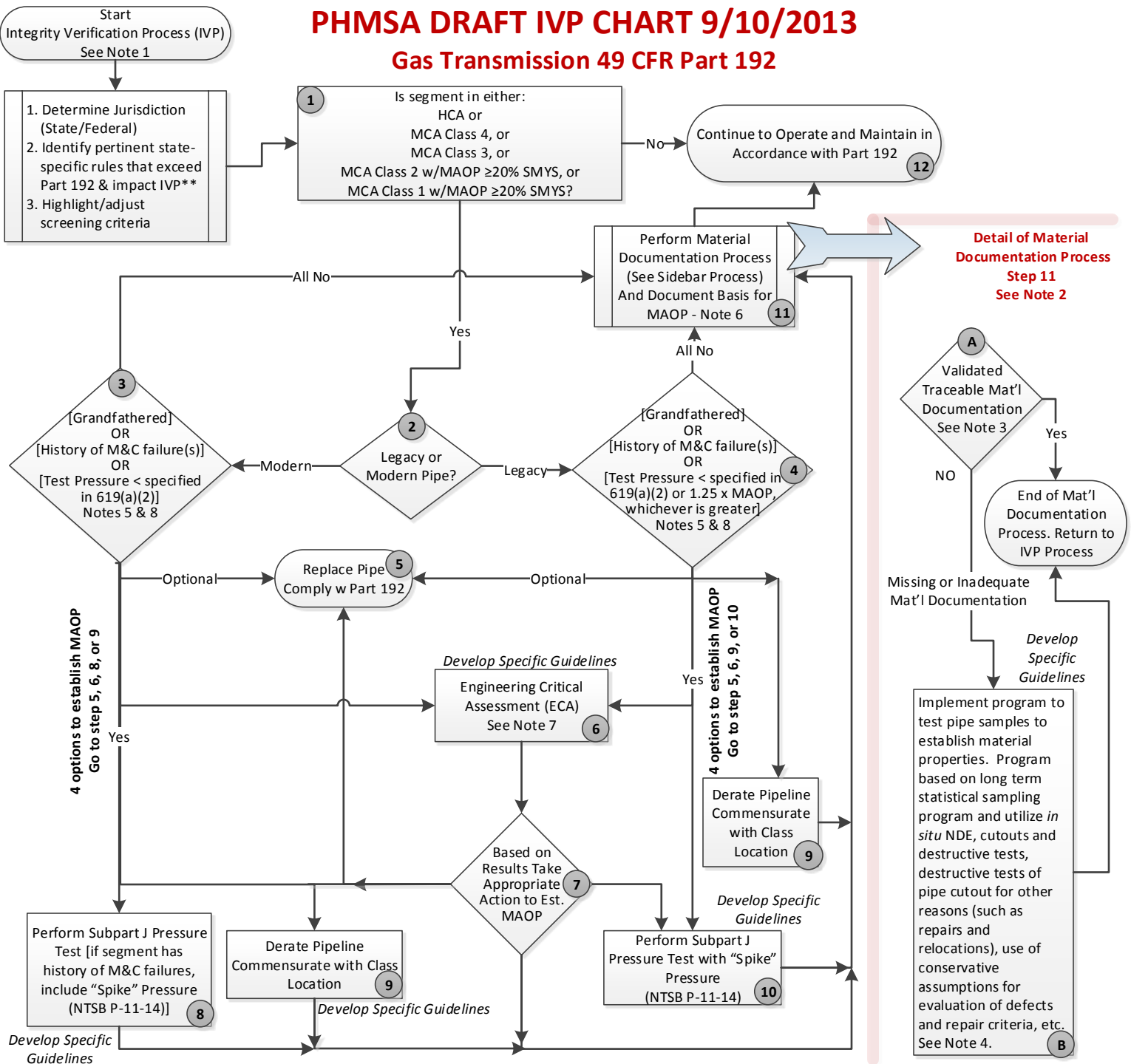


PHMSA DRAFT IVP CHART 9/10/2013

Gas Transmission 49 CFR Part 192



Notes:

Grandfathered means pipe segments installed before July 1, 1970 with MAOP established in accordance with 192.619(c).

High Consequence Area (HCA) as defined in 192.903.

Legacy Pipe means pipe manufactured using LF-ERW, SSAW, Flash Weld (AO Smith), or pipe w/ joint factor < 1 (e.g., lap welded pipe) regardless of date of manufacture, OR pipe constructed or repaired using problematic construction techniques such as wrinkle bends, miter > 3 degrees, Dresser Couplings, non-standard fittings, arc welds, oxyacetylene welds, bell spigots, puddle weld repairs, etc.

Modern Pipe means pipe other than Legacy Pipe.

Moderate Consequence Area (MCA) means non-HCA pipe in Class 4, 3, or 2 locations, & Class 1 locations with 1 house/occupied site in PIR.

Note 1: Validation of MAOP per 192.619(d), Alternate MAOP, while applicable, is not anticipated to be a problem and not addressed in IVP flow chart.

Note 2: Validated mat'l properties req'd for line pipe of X42 grade and greater, and pipe ≥ 2"OD if on the mainline, and fittings, valves, flanges & components.

Note 3: If operator does not have design & material documentation in accordance with 192.619(a)(1) per ADB 11-01 & 12-06, segment is deemed to not have adequate documentation for purposes of this determination. Required records include mill test reports (or equivalent) showing test results for chemical & mechanical properties.

Note 4: Sampling to cover each unique combination of pipe type and vintage.

Note 5: If operator does not have pressure test records in accordance with 192.619(a)(2) per ADB 11-01 & 12-06, segment deemed to not have a valid pressure test.

Note 6: If operator chooses ECA option, material documentation process must be conducted as part of the ECA process step 7.

Note 7: ECA consists of material documentation, assessment, and analysis to establish material condition of pipeline and MAOP, **commensurate with segment-specific issues and documentation shortcomings**. Assessment could include, as appropriate: ILI Program, CIS, Coating Survey, Interference Survey Remaining Life Fatigue Analysis, etc.

Note 8: Revise 192.619(a) to require min. 1.25 MAOP pressure test for new pipe.

**Some state requirements exceed Part 192. For example: (i) pressure test at 150% MAOP to establish MAOP, or (ii) all gas transmission (GT) to be classified and constructed to Class 4 requirements, or (iii) define as GT if MAOP>125 psig, etc.