

(B) A dent that has any indication of metal loss, cracking or a stress riser.

(C) An anomaly that in the judgment of the person designated by the operator to evaluate the assessment results requires immediate action.

(ii) *180-day remediation.* Except for conditions listed in paragraph (i)(4)(i) of this section, an operator must remediate any of the following within 180 days of discovery of the condition:

(A) A dent with a depth greater than 6% of the pipeline diameter (greater than 0.50 inches in depth for a pipeline diameter less than Nominal Pipe Size (NPS) 12).

(B) A dent with a depth greater than 2% of the pipeline's diameter (0.250 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or a longitudinal seam weld.

(iii) *Remediation longer than 180 days.* An operator may take more than 180 days following discovery of the condition to remediate any of the following conditions unless the anomaly grows to critical stage. If the anomaly grows to critical stage, the operator must follow the immediate repair requirements in paragraph (i)(4)(i) of this section.

(A) In a segment assessed by internal inspection, a calculation of the remaining strength of the pipe shows a predicted failure pressure greater than 1.1 times the established maximum operating pressure at the location of the anomaly. An operator must remediate the condition in accordance with ASME/ANSI B31.8S, Section 7, Figure 7-1.

(B) In a segment assessed by any integrity assessment method, an anomalous condition other than those listed in paragraphs (i)(4)(i) or (ii) of this section.

(j) *What additional preventive and mitigative measures must an operator take to protect the high consequence area?*

(1) *General Requirements.* An operator must take measures to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator's measures will be based on the threats it has identified to each pipeline segment (see paragraph (f)). These measures include an operator conducting, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S, Section 5, a risk analysis of the covered pipeline segments to identify additional actions to enhance public safety. Such actions include, but are not limited to, installing Automatic Shut-off valves or Remote Control Valves, installing computerized monitoring and

leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional extensive inspection and maintenance programs.

(2) *Third Party Damage and Outside Force Damage.* An operator must take additional measures to prevent and minimize the consequence of a release from third party damage or outside force damage. These measures must be in addition to any already required under this Part. An operator may follow ASME/ANSI B31.8S, Table 7-1 of Section 7 in identifying these measures. To minimize the consequences from third party damage, including vandalism, measures include, but are not limited to, increasing the frequency of aerial and foot patrols, participating in one-call systems, conducting extensive public education campaigns, increasing marker frequency, increasing cover depth, and adding leakage control measures. To minimize the consequences from outside force damage (e.g. earth movement, floods, unstable suspension bridge) these measures include, but are not limited to, increasing the frequency of aerial and foot patrols, adding external protection, reducing external stress, and relocating the line.

(3) *Automatic Shut-off valve (ASV) or Remote Control Valves (RCV).* If an operator determines that an ASV or RCV is needed on a pipeline segment to protect a high consequence area in the event of a gas release, an operator must install the ASV or RCV. In making that determination, an operator must, at least, consider the following factors—swiftness of leak detection and pipe shutdown capabilities, the type of gas being transported, operating pressure, the rate of potential release, pipeline profile, the potential for ignition, and location of nearest response personnel.

(k) *What is a continual process of evaluation and assessment to maintain a pipeline's integrity?*

(1) *General.* After completing the baseline integrity assessment of a covered segment, an operator must continue to assess the line pipe of that segment at the intervals specified in paragraph (k)(3) and periodically evaluate the integrity of each covered pipeline segment as provided in paragraph (k)(2). The reassessment period for a segment begins upon completion of the prior assessment.

(2) *Evaluation.* An operator must conduct a periodic evaluation as frequently as needed to assure pipeline integrity. The periodic evaluation must

be based on a data integration of the entire pipeline as specified in paragraph (f) of this section to identify the threats specific to a pipeline segment. The evaluation must consider the past and present integrity assessment results, data integration information (paragraph (f) of this section), and decisions about remediation and preventive and mitigative actions (paragraphs (i) and (j) of this section).

(3) *Re-Assessment intervals.* An operator must establish a re-assessment interval for each covered pipeline segment. An operator must comply with the following requirements in establishing the interval for the operator's covered pipeline segments.

(i) *General.* Unless a period of less than seven years is specified, each covered pipeline segment must be reassessed at a seven-year interval. If the operator establishes a reassessment interval for the covered segment that is greater than seven years, the operator must within the seven-year period, conduct a confirmatory direct assessment on the covered segment, and then conduct the follow-up reassessment. The reassessment done by confirmatory direct assessment must be done in accordance with paragraph (h)(6) of this section.

(ii) *Pressure test or internal inspection, or other equivalent technology.*

(A) An operator that uses pressure testing or internal inspection as an assessment method must establish the reassessment interval for covered pipeline segments by—

(1) Basing the intervals on the identified threats for the segment as listed in paragraph (f) of this section and in ASME/ANSI B31.8S, Table 8-2, section 8, and on the analysis of the results from the last integrity assessment and from the data integration required by paragraph (f) of this section; or

(2) Using the intervals for different stress levels of pipeline specified in ASME/ANSI B31.8S, Table 8-1, section 8.

(B) However, under either option, the maximum reassessment interval must not exceed ten (10) years for a pipeline operating at or above 50% SMYS, and 15 years for a pipeline operating below 50% SMYS. An operator choosing the maximum period allowed for reassessment must demonstrate that it has implemented enhanced preventive and mitigative measures for the segment.

(iii) *Direct assessment.*

(A) An operator that uses direct assessment must determine the reassessment interval according to the following calculation.