

interval of seven years for operators using pressure test, internal inspection or equivalent technology, and a five year interval for an operator using direct assessment that directly examines and remediates defects by sampling. However, an operator using pressure test, internal inspection or equivalent technology could establish a longer interval, within established limits if the operator by the seventh year conducts a reassessment using confirmatory direct assessment and then conducts the follow up reassessment by the chosen method in the year the operator has set for the interval. The interval for reassessment begins to run on a segment after the operator has completed the previous assessment for that segment.

Under the proposed rule, an operator establishes the reassessment interval for covered segments based on the type of assessment method the operator plans on using. The type of method used establishes the maximum interval. For operators using pressure testing, internal inspection, or alternative technology as an assessment method, the operator is to base the intervals on the identified threats for the segment or on the stress level of the pipeline and then refer to ASME/ANSI B31.8S, Section 8 to establish the interval. Under either option, the proposed maximum interval is ten years and 15 years for a pipeline operating at below 50% SMYS. However, because a reassessment must be conducted by the seventh year, under the proposal, if an operator establishes an interval of ten years for a segment, the operator would have to complete a confirmatory direct assessment by the seventh year, and then in the tenth year do a follow up reassessment using pressure test, internal inspection tool, direct assessment or alternative equivalent technology.

OPS has predicated the proposed 15-year maximum reassessment interval for pipelines operating below 50% SMYS on several factors.

- *Greater safety margin the current regulations provide.* Current pipeline safety requirements provide a greater safety margin against corrosion for gas pipelines located in populated areas. For example, the regulations require pipelines that are located in Class 3 and 4 locations (high population areas) to be of greater wall thickness than pipelines located in Classes 1 and 2 locations. And operators must replace the existing pipe with thicker, stronger pipe when population density increases (*i.e.*, the class location changes). Thus, pipelines located in populated areas are less susceptible to corrosion-induced rupture, because it takes much longer

for corrosion to penetrate the pipe to a depth where the corrosion causes any concern.

- *The actual reassessment interval is based on risk factors.* The reassessment interval will depend on numerous risk factors, such as the baseline assessment results, the remediation of defects found during the baseline and the integration of data concerning other risk factors. Thus, higher risk pipe will be reassessed sooner.

- *Gas supply interruptions.* Gas transmission pipelines typically feed directly into customer distribution lines without an intermediate storage location. A pipeline's operating pressure is generally lower (*i.e.*, pipeline is at a lower stress level) when it is at the transition phase into a distribution line. This close coupling between the transmission and distribution systems increases the likelihood of a supply interruption if a single line is shutdown for assessment or repair. The 15-year maximum is intended to minimize these supply interruptions.

- *Industry consensus standards.* ASME B31.8S specifies a reassessment interval of 15 years for pipelines operating below 50% SMYS, and 20 years for pipelines operating between 20% and 30% SMYS. These reassessment intervals are based on a mathematical model Kiefner and Associates developed.

These factors led us to conclude that the proposed 15-year maximum reassessment interval for pipelines operating below 50% was reasonable for operators yet would ensure safety. Again, as discussed previously, an operator would have to complete a confirmatory direct assessment by the seventh year.

RSPA/OPS is inviting public comment on whether we should allow a maximum 20-year reassessment interval (with a confirmatory direct assessment in the seventh and 14th years) on pipelines operating at less than 30% SMYS, and reassessment by the confirmatory direct assessment method only every seven years for pipelines operating below 20% SMYS. The proposed confirmatory direct assessment method could be further streamlined for pipelines operating below 20% SMYS. OPS is considering a maximum interval of 20 years for pipelines operating between 20% to 30% SMYS (with a confirmatory direct assessment by the 7th and 14th years) because numerous studies and analyses have demonstrated that these low stress pipelines tend to leak, rather than to rupture. Current gas pipeline safety regulations recognize the reduced risk that low stress levels pose, and structure

the requirements accordingly. Examples of different requirements for pipelines operating at lower stress are in § 192.65 (Transportation of pipe), § 192.227 (Qualification of welders), § 192.241 (Inspection and test of welds), § 192.309 (Repair of steel pipe), § 192.315 (Wrinkle bend in steel pipe), § 192.319 (installation of pipe in a ditch), § 192.505 (Strength requirements for steel pipeline to operate at a hoop stress of 30% or more of SMYS), § 192.711 (General requirements for repair procedures), and § 192.717 (Permanent field repair of leaks).

The maximum reassessment interval for operators using direct assessment as an assessment method is five years under this proposal, provided an operator directly examines and remediates defects by sampling. The reassessment interval under direct assessment would be expanded to ten years if an operator conducts a direct examination of all indications and remediates the anomalies. If an operator establishes an interval of more than seven years on a segment, the operator would have to conduct a confirmatory direct assessment by the seventh year. Additional detail on reassessment intervals is provided elsewhere in this preamble and at section 192.763(k) of the proposed rule.

RSPA/OPS is inviting public comment on whether we should allow an operator using direct assessment a maximum ten-year reassessment interval on a pipeline operating at less than 30% SMYS regardless of whether the operator excavates and remediates all anomalies on that line, or at least remediates the highest-risk anomalies. Again, the operator would have to conduct a confirmatory direct assessment by the seventh year of the interval.

The number of excavations (Dig Criteria) proposed for the direct assessment method follow those being developed by the National Association of Corrosion Engineers (NACE) Recommended Practices on Direct Assessment, with the following deviations:

- (1) In each External Corrosion Direct Assessment (ECDA) region where all indications categorized as "immediate" are present, we propose that the operator reduce operating pressure by at least 20% until such indications have been excavated and mitigated.

- (2) In each ECDA region where indications categorized as "scheduled" are present, we propose the operator continue the excavations until at least two indications are excavated having corrosion of depth no greater than 20% of wall thickness.