

ANSI B31.8S as needing a response. The rule also continues to specify that this must occur within 180 days after conducting the assessment, unless the operator demonstrates the 180-day period is impracticable. This is the same period used for the corresponding requirement for hazardous liquid pipelines. RSPA/OPS considers that identified anomalies should be dealt with promptly, and that delaying the requirement for discovery to occur until one year after an assessment is not consistent with that need.

The basis on which RSPA has accepted the recommendation to change the time allowed for evaluation and remediation of certain defects from 180 days to one year is that gas pipelines typically do not operate with pressure fluctuations sufficient to cause cyclic fatigue. Therefore, the subject defects can be allowed to remain for up to one year. In addition, this position is consistent with provisions of ASME/ANSI B31.8S.

The remediation requirements associated with dents have been revised in response to the comments to distinguish between bottom-side and top-side dents. The rule now provides that dents greater than 6% of the pipe diameter in depth in the top two-thirds of the pipe (*i.e.*, 8 o'clock to 4 o'clock), or greater than 2% and affecting curvature at a weld, must be remediated in one year. The rule allows such dents to be treated as monitored conditions if an operator obtains information and performs engineering analyses to demonstrate that critical strain levels have not been exceeded. An operator must also monitor dents on the bottom-third of the pipeline. The rule now also differentiates between smooth and abrupt dents because abrupt dents need to be prioritized for evaluation before smooth dents.

We have revised the requirement for pressure reduction. If an operator is unable to respond within the required time limits for certain conditions, the operator must temporarily reduce the operating pressure of the pipeline or take other action that ensures the safety of the covered segment. Thus, a pressure reduction is not automatic. If the operator reduces pressure, the reduction cannot exceed 365 days without an operator providing a technical justification that the continued pressure restriction will not jeopardize the integrity of the pipeline. The requirement that a pressure reduction cannot last more than 365 days without further action is identical to a requirement in the integrity management rule for hazardous liquid pipelines. The reduction provides an

increased margin of safety in the interim, while repair can be planned and implemented.

9. Additional Preventive and Mitigative Measures, Including, Leak Detection Devices and Automatic Shut-Off and Remote Control Valves—§ 192.933 (Formerly § 192.763(j))

We received a large number of comments on the proposed additional preventive and mitigative measures.

INGAA asserted that excavation damage is the primary cause of 28% of reportable incidents and that the proposed rule focuses primarily on previously damaged pipe which is associated with only 4% of reportable incidents. INGAA proposed additional requirements be incorporated for the prevention of third-party damage and that the assessment for previously damaged pipe be integrated into the assessment processes for other failure causes. Dominion suggested eliminating the proposed requirement to conduct an internal inspection looking for third-party damage because it is ineffective. Equitable opposed pressure testing for third-party damage detection asserting there is no technical justification. These and many other commenters opposed the proposal to utilize an assessment tool to identify third-party damage. Commenters agreed that direct assessment is the number one tool for assessing third-party damage. Numerous commenters, including Enron and the Northeast Gas Association, argued that prevention is the best approach and urged RSPA/OPS to champion efforts to eliminate exemptions to the various state one-call programs.

AGA proposed a set of additional preventive and mitigative measures as assessment methods for addressing external and internal corrosion and third-party damage for pipelines operating below 30% SMYS and not in HCAs but in Class 3 and 4 locations. Again, numerous commenters supported these additional preventive and mitigative measures including NiSource, Laclede Gas, and the Association of Texas Intrastate Natural Gas Pipelines.

Several comments related to the proposal to install automatic shut-off valves and remote control valves as potential risk mitigative measures. None of those commenters supported their use. PSE&G asserted there is no technical justification for their use and Enron asserted that it has been demonstrated that these valves provide no additional safety benefit. Panhandle Eastern referenced a Gas Research Institute Report which, according to Panhandle Eastern, concludes that the

cost of installing the valves is not justified by the limited benefit.

One company commented that its leak detection system would be effective on gas pipeline systems and asked that RSPA review the system for potential use on natural gas pipelines to better monitor leaks.

Response: The final rule incorporates additional requirements to help prevent accidents caused by third-party damage, including requiring participation by pipeline operators in one-call systems. We have not included the proposed requirement to conduct assessments specifically to evaluate possible third-party damage.

The rule also incorporates additional prevention and mitigation requirements for low-stress pipelines that are located in Class 3 and 4 areas but not HCAs. This was not an issue in the proposed rule, because all Class 3 and 4 areas would have been defined as HCAs. The revised definition for HCAs included in the final rule will mean that some pipeline in populated areas (*i.e.*, Class 3 and 4) will not be determined to be in HCAs. RSPA/OPS agrees with AGA that it is appropriate that additional measures be implemented in these populated areas to protect the pipeline. The final rule incorporates the provisions recommended by AGA.

With respect to automatic and remotely-operated shut-off valves, RSPA/OPS acknowledges generic work, some sponsored by RSPA/OPS that concluded that installation of such valves is usually not cost-beneficial. The conclusions of those studies were based, however, on generic, average conditions. It is possible that conditions particular to individual pipeline segments in HCAs may change this conclusion, making it appropriate to install or modify valves. The rule requires operators to make this determination and to install a valve if it would be an efficient means of adding protection to a high consequence area in the event of a gas release. RSPA/OPS does not expect that operators will perform detailed technical analyses that duplicate the work done in the generic studies. Instead, operators will use the generic work as a starting point and then evaluate whether the generic conclusions are applicable to their high consequence area pipeline segments. The results of this evaluation must be documented for review during RSPA/OPS inspections.

As for the leak detection system the commenter described, RSPA/OPS does not require that operators install particular safety systems, nor does it endorse them. Vendors who believe their systems will allow companies to