



Highlights of [GAO-06-945](#), a report to congressional committees

Why GAO Did This Study

The Pipeline Safety Improvement Act of 2002 requires that operators (1) assess gas transmission pipeline segments in about 20,000 miles of highly populated or frequently used areas by 2012 for safety threats, such as incorrect operation and corrosion (called baseline assessments), (2) remedy defects, and (3) reassess these segments at least every 7 years. Under the Pipeline and Hazardous Materials Safety Administration's (PHMSA) regulations, operators must reassess their pipeline segments for corrosion at least every 7 years and for all safety threats at least every 10, 15, or 20 years, based on industry consensus standards—and more frequently if conditions warrant. Operators must also carry out other prevention and mitigation measures.

To meet a requirement in the 2002 act, this study addresses how the results of baseline assessments and other information inform us on the need to reassess gas transmission pipelines every 7 years and whether inspection services and tools are likely to be available to do so, among other things. In conducting its work, GAO contacted 52 operators that have carried out about two-thirds of the baseline assessments conducted to date.

What GAO Recommends

The Congress should consider allowing gas transmission pipeline operators to reassess their pipelines using risk-based standards. In commenting on a draft of this report, the Department of Transportation generally agreed with it and the Department of Energy stated that it had no comments.

www.gao.gov/cgi-bin/getrpt?GAO-06-945.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Siggerud (202) 512-2834 or siggerudk@gao.gov.

NATURAL GAS PIPELINE SAFETY

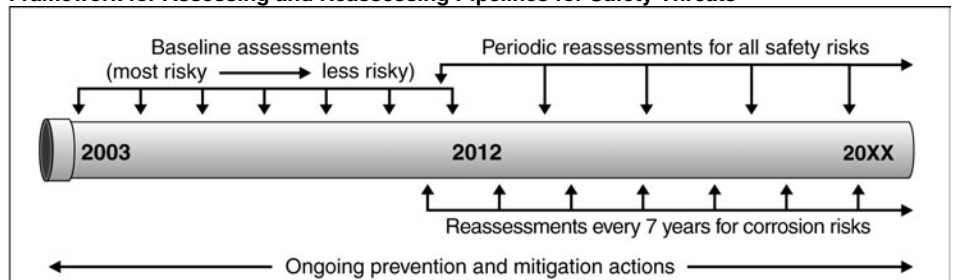
Risk-Based Standards Should Allow Operators to Better Tailor Reassessments to Pipeline Threats

What GAO Found

Periodic reassessments of gas transmission pipelines are useful because safety threats can change. However, the 7-year requirement appears to be conservative because (1) most operators found few major problems during baseline assessments, and (2) serious pipeline incidents involving corrosion are rare, among other reasons. Through December 2005 (latest data available), 76 percent of the operators (182 of 241) that had begun baseline assessments reported to PHMSA that their pipelines required only minor repairs. These results are encouraging because operators are required to assess their riskiest segments first. Since operators are also required to repair these problems, the overall safety and condition of their pipelines should be enhanced before reassessments begin. In addition, PHMSA data suggest that serious gas transmission pipeline problems due to corrosion are rare. For example, there have been no deaths or injuries as a result of incidents due to corrosion since 2001. Of the 52 operators contacted that have calculated reassessment intervals, the large majority (20 of 23) told GAO that based on conditions identified during baseline assessments, they could safely reassess their pipelines for corrosion, every 10, 15, or 20 years—as industry consensus standards prescribe unless pipeline conditions warrant an earlier assessment.

Sufficient resources may be available for operators' reassessment activities, but some uncertainty exists. For the most part, the 52 operators that GAO contacted expect to be able to obtain the services and tools needed through 2012. However, they expressed some concern about whether enough qualified vendors for the confirmatory and direct assessment methods (above-ground inspections followed by excavations) would be available. Industry associations and GAO attempted to determine the degree to which activity would increase from 2010 to 2012, when operators begin reassessing pipelines while completing baseline assessments. An industry effort showed an increase in assessment and reassessment activity, but GAO's showed a decrease. The reasons for the differences are not clear but may be due, in part, to differences in the operators contacted and the methodologies used in collecting this information.

Framework for Assessing and Reassessing Pipelines for Safety Threats



Source: GAO.