

# GAO@100 Highlights

Highlights of [GAO-21-493](#), a report to congressional committees

## Why GAO Did This Study

The U.S. hazardous liquid pipeline network runs for over 220,000 miles and is a critical component of the nation's economy. Pipelines are considered to be a relatively safe mode of transporting crude oil, refined petroleum products, and other hazardous liquids, but accidents can occur that result in loss of life and environmental damage. PHMSA, within the Department of Transportation (DOT), sets the federal minimum pipeline safety standards and generally ensures operator compliance.

In 2016, a pipeline safety statute included a provision for GAO to report on hazardous liquid pipeline safety after PHMSA issued a specific final rule amending its safety regulations, which it did in 2019. This report examines: (1) perspectives of selected pipeline stakeholders on the benefits and challenges of the amendments made by the 2019 Rule and (2) steps PHMSA has taken to inform stakeholders of these amendments and to measure their effects on pipeline safety. GAO reviewed relevant statutes and regulations; analyzed PHMSA accident data from calendar years 2011-2020; interviewed 11 pipeline operators—selected by pipeline type, miles, and product type—as well as pipeline industry and safety stakeholders, and PHMSA and pipeline safety officials from six states.

## What GAO Recommends

PHMSA should develop and use performance measures to assess whether the changes made by the 2019 Rule achieve desired outcomes and improve safety. DOT concurred with GAO's recommendation.

View [GAO-21-493](#). For more information, contact Elizabeth Repko at (202) 512-2834 or [repkoe@gao.gov](mailto:repkoe@gao.gov).

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## PIPELINE SAFETY

### Performance Measures Needed to Assess Recent Changes to Hazardous Liquid Pipeline Safety Regulations

## What GAO Found

In 2019, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a final rule amending its hazardous liquid pipeline safety regulations. Selected pipeline operators and officials from PHMSA and selected states' pipeline safety offices said that these changes would enhance pipeline safety and present no significant challenges. They said the most beneficial changes expanded the scope of inspections. For example, in addition to existing requirements for operators to use specialized tools to inspect pipelines in "high consequence areas"—defined by population and environmental factors—the 2019 Rule requires such inspections outside of those areas. While operators noted the rule's potential to improve safety, all 11 operators GAO interviewed identified specific amendments that could increase their costs. For example, several operators said they would need to modify or replace some of their pipeline to allow for certain inspection tools required by the changes. PHMSA and state pipeline safety officials said they did not anticipate oversight challenges or additional costs because the changes did not alter their inspection process.

#### Specialized In-Line Inspection Tool Being Placed in a Launch Point on a Pipeline



Source: Texas Oil and Gas Association. | [GAO-21-493](#)

PHMSA held meetings with and provided guidance to operators and inspectors on the changes but has not developed measures to assess if the changes improve safety. Leading performance management practices call for agencies to track progress toward goals using measures that include targets for expected levels of performance and timeframes. While PHMSA has desired outcomes for the 2019 Rule, including safety improvements, PHMSA officials said they have not established performance measures for those outcomes because some of the changes have long-term compliance deadlines, and so data are not yet available to assess effectiveness. However, other changes have shorter-term deadlines for compliance and PHMSA could use data it already collects from operators for its assessment. Without performance measures, PHMSA cannot determine whether the changes made by the 2019 Rule are achieving their intended outcomes and contributing to PHMSA's safety goals.