

GAO Highlights

Highlights of [GAO-18-89](#), a report to congressional requesters

Why GAO Did This Study

Natural gas storage is important for ensuring that natural gas is available when demand increases. There are 415 storage sites—including underground caverns and depleted aquifers and oil and gas reservoirs—located in 31 states, often near population centers (see fig.). Leaks from these sites, such as one near Los Angeles that led to the temporary relocation of about 8,000 families in 2015, can result in environmental and economic damage. Until 2016, states set standards for 211 sites, but there were no standards for 204 sites connected to interstate pipelines subject to federal jurisdiction. With passage of the PIPES Act of 2016, PHMSA, an agency within DOT that sets and enforces standards for energy pipelines, among other things, was tasked with issuing minimum standards for all gas storage sites.

GAO was asked to review natural gas storage safety standards. This report examines (1) PHMSA's efforts to implement the requirement to issue minimum safety standards for natural gas storage sites and (2) the extent to which PHMSA has planned strategically to enforce its safety standards for these sites. GAO reviewed PHMSA documents and plans, compared them to leading planning practices, and interviewed PHMSA officials.

What GAO Recommends

GAO is making two recommendations, which are that PHMSA (1) define levels of performance and address all core program activities and (2) use budget data to refine performance goals for its gas storage program. DOT concurred with GAO's recommendations.

View [GAO-18-89](#). For more information, contact Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov; or Frank Rusco at (202) 512-3841 or ruscof@gao.gov

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NATURAL GAS STORAGE

Department of Transportation Could Take Additional Steps to Improve Safety Enforcement Planning

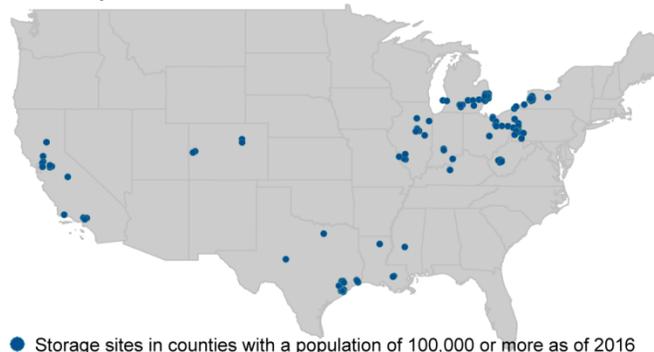
What GAO Found

To meet its requirement under the Protecting Our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016, the Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) issued minimum safety standards in an interim rule and plans to finalize them by January 2018. Under the interim standards, site operators are to follow industry-developed best practices to detect and prevent leaks and plan for emergencies, among other things. Since the interim rule went into effect in January 2017, the minimum safety standards apply to all 415 natural gas storage sites, and the rule will be subject to further revision before it is final.

To enforce its safety standards, PHMSA has taken steps to establish a natural gas storage safety enforcement program. For example, PHMSA has started developing a training program for its inspectors. PHMSA also has identified a strategic goal for its program—to promote continuous improvement in safety performance—and is developing a performance goal for its training program.

However, PHMSA has not yet followed certain leading strategic planning practices. For example, PHMSA has not yet defined the level of performance to be achieved, fully addressed all core program activities, or used baseline data to develop its performance goal. GAO has previously reported that requirements under the Government Performance and Results Act (GPRA) and GPRA Modernization Act of 2010—which include establishing performance goals to define the level of performance—can serve as leading practices for lower levels of an agency, such as PHMSA. GAO also has found that successful performance goals address all core program activities. PHMSA's goal focuses on training and does not address other core program activities, such as conducting effective inspections. For example, a goal to evaluate whether PHMSA's inspections are effective could be to annually reduce, by a certain percentage, the number of sites not meeting minimum standards. PHMSA officials told GAO that they will strive to add and refine performance goals as the program evolves. As they do so, ensuring that these goals define the level of performance, address all core program activities, and use baseline data could help PHMSA better track progress toward its strategic goal.

Approximate Location of Natural Gas Storage Sites within Counties Populated by 100,000 or More People



Source: GAO analysis of Energy Information Administration and Census Bureau data. | GAO-18-89