

The PIPELINE Safety Act of 2025

The PIPELINE Safety Act of 2025 takes important steps to close existing gaps in safety requirements, addresses known risks, and holds commercial pipeline operators accountable when accidents occur. The bill reauthorizes the Pipeline and Hazardous Materials Safety Administration (PHMSA) through September 30, 2030.

The Act Holds Pipeline Operators Accountable:

1. Increases Civil Penalties by 50 Percent

Currently, operators face civil penalties of about \$260,000 per day for violations, with a maximum of \$2.6 million for a series of violations. This bill raises penalties to \$400,000 per day, with a maximum of \$4 million per series of violations.

2. Strengthens State Inspection Programs

States conduct roughly 80 percent of pipeline inspections nationwide. This bill increases funding by 20 percent for state inspection programs compared to the last authorization, ensuring state partners have the resources needed to maintain rigorous oversight.

The Act Requires Proactive Action to Address Well Known Safety Risks:

3. Permanent Cybersecurity Requirements for Critical Pipelines

Cybersecurity vulnerabilities can cause significant disruptions to our nation's energy infrastructure. The Colonial Pipeline cyber-attack in 2023 shut down a pipeline responsible for transporting 45 percent of all fuel consumed on the East Coast. This provision requires TSA to make permanent the temporary cybersecurity requirement that the agency put in place following the Colonial Pipeline attack.

4. Geohazards (Landslides, Earthquakes, Flooding, River Scour)

When land shifts around a pipeline, it can compromise infrastructure integrity and cause accidents, and climate change is making many geohazards more common and more severe. According to the U.S. Geological Survey, 44 percent of the United States is at risk of landslides. Currently, PHMSA does not require operators to take steps to minimize the risks to their pipelines caused by these events. The bill requires operators to mitigate geohazard risks proactively and inspect facilities after such events to ensure their pipeline remains safe to operate.

5. High-Risk Plastic Pipelines

Aldyl-A, a plastic material used in distribution pipelines during the 1970s, has been linked to multiple pipeline failures, including the 2023 factory explosion in West Reading, Pennsylvania. In its investigation, the NTSB found that Aldyl-A was a contributing factor in the explosion and directed PHMSA to require operators to mitigate the risks of this plastic. For the first time, this bill requires pipeline operators to report on the presence of Aldyl-A in their systems and take steps to mitigate the risks, including replacement where necessary.

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6. Updating Potential Impact Radius Calculations

Pipeline regulations are based on the risk pipelines pose to surrounding communities. To estimate this, operators use a standard formula set by PHMSA to calculate how many houses and businesses fall within a pipeline's "potential impact radius." However, following an Enbridge Pipeline explosion in Danville, Kentucky in 2019 that killed one person, injured 6, and forced the evacuation of dozens of people, the NTSB has found that pipeline damage can occur beyond the estimated radius. This bill requires PHMSA to study past incidents and determine the actual impact radius of accidents allowing PHMSA to understand if its current formula reflects real-world risks.

7. Automatic Gas Shutoff During House Fires

During a house fire, natural gas can intensify the blaze if the system continues to feed gas into the home. The bill requires PHMSA to set new standards requiring utilities to install automatic shutoff devices that stop gas flow during a fire.

The Act Closes Safety Gaps for Emerging Gases:

8. New Safety Requirements for Hydrogen Blending in Natural Gas Pipelines

Some natural gas utilities are starting to blend hydrogen into their natural gas pipeline systems to potentially reduce emissions. However, these natural gas systems were designed to transport methane, not hydrogen. The potential risks of this practice are not well known and currently there are no prescriptive safety requirements for blending hydrogen into existing natural gas systems. More concerning is that PHMSA may not even know this blending is occurring because operators are only required to report the "predominant" material being transported.

This bill requires operators to report to PHMSA if they are intentionally blending. This bill also directs PHMSA to enlist the help of our nation's preeminent research institutions – the national laboratories – to study potential risks of hydrogen blending and then update federal safety standards to address any identified safety risks.

9. New Safety Requirements for Carbon Dioxide Pipelines

Most carbon dioxide pipelines are currently regulated as liquid pipelines because CO₂ is transported in a liquid-like state. However, during accidents, such as the Denbury pipeline rupture in Satartia, Mississippi, the CO₂ that is released rapidly turns into a gas. Existing emergency preparedness requirements for these pipelines do not adequately address CO₂ hazards. For example, Denbury failed to consider that CO₂ could travel along the ground for more than a mile, hospitalizing 45 people and forcing the evacuation of the entire town. This bill requires PHMSA to issue safety standards specific to CO₂ pipelines, including requirements that account for the risks of CO₂ traveling after a release.