

Methane Leak Detection and Repair Fact Sheet February 2024

- Natural gas now contributes [more to U.S. climate pollution than coal](#). Methane is the primary component of natural gas and has over 80 times the warming power of carbon dioxide over the first 20 years.
- Currently, the pipeline segments of the natural gas supply chain (gathering, transmission and storage, and local distribution) are [estimated](#) to emit between [1.25 and 2.66 million metric tons of methane](#) annually (which [translates](#) to an equivalence of between 7.8 million and 16.6 million gasoline-powered passenger cars driven for one year).
- Prior to the [PIPES Act of 2020](#), natural gas pipeline operators, representing the transportation segments of the natural gas supply chain, were able to leak and vent natural gas into the atmosphere as a regular course of business so long as there was no risk of explosion.
- The Pipeline and Hazardous Materials Safety Administration (PHMSA) has published a [Notice of Proposed Rulemaking](#) (NPRM) which would require operators to use advanced leak detection programs, increase leak survey frequency, limit intentional emissions, and repair all leaks. The rule will apply to 2.7 million miles of gas transmission, distribution, and gathering pipelines, in addition to 400 underground natural gas storage facilities and 165 liquified natural gas facilities.
- The rule has been identified by the White House in its [U.S. Methane Emissions Reduction Action Plan](#) as priority number two for addressing climate change.
- Finalization of the rule requires completion of a Gas Pipeline Advisory Committee (GPAC) meeting in which members review the rule’s technical feasibility. The committee convened last fall but did not finish its review of the rule.
- It is critical that PHMSA finalize the rule as soon as possible to address the climate crisis and prevent the rule from being repealed via the Congressional Review Act.

Before the Protecting Our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2020, the only reason a natural gas pipeline operator needed to worry about fixing a leak in its system was if it was considered “hazardous” – that is, if the leak might explode and impact public safety or cause property damage. The current regulations do not prohibit an operator from having “non-hazardous” gas pipeline leaks with no plan to repair them, or from intentionally releasing natural gas; indeed, those have long been normal parts of natural gas pipeline operations.

The PIPES Act of 2020 changes that in several important ways. Although the charge to PHMSA in the Pipeline Safety Act has long included “protecting the environment” along with protecting people, the attention to potential environmental harm has typically been confined to the transport of hazardous liquids. The transport of natural gas, and any methane losses in the process, have not been treated as the major environmental concern that they are. That changed with the 2020 bill.

The Pipeline Safety Trust (PST) has long advocated for better leak detection requirements, with enforceable performance metrics for leak detection systems. We’ve also made it a priority to establish regulations for gas gathering lines, hundreds of thousands of miles of which remain unmapped and virtually unregulated, with no constraints, and not even any information about their construction, location, size, use, failures – or really, their existence. Working with Environmental Defense Fund, Natural Resources Defense Council, Senator Udall’s office, and Senator Cantwell’s office, PST succeeded in making major progress to improve how PHMSA regulates gas pipeline methane releases, bringing attention back to the fact that PHMSA has responsibility for environmental protection as well as pipeline safety.

With direction from sections 113 and 114 of the PIPES Act, PHMSA published a Notice of Proposed Rulemaking (NPRM) on May 18, 2023. The rule, titled *Pipeline Safety: Gas Pipeline Leak Detection and Repair*, requires the use of advanced leak detection programs, increases leak survey frequency, limits intentional emissions, and requires the repair of all leaks. The rule will apply to 2.7 million miles of gas transmission, distribution, and gathering pipelines, in addition to 400 underground natural gas storage facilities and 165 liquified natural gas facilities. The proposed rule also amends its 3 million cubic feet incident reporting threshold for large unintentional methane releases to 1 million cubic feet and establishes, for the first time, a reporting threshold for intentional releases such as venting.

After a 90-day comment period, the docket closed on August 15, 2023. Thousands of members of the public commented in support of the rule. Prior to finalization, the rule must be reviewed by a technical standards committee, known informally as the Gas Pipeline Advisory Committee (GPAC). GPAC convened a meeting to review the rule from Nov. 27 – Dec. 2, 2023, but it did not finish reviewing the rule. Another meeting will be convened spring 2024 and PST is hopeful that review will be completed then. Members of the public are encouraged to submit comments into the GPAC docket or attend in person to make their perspectives heard. PST will provide information about public participation at the GPAC meeting when it is made available.

This rule is critical to address the climate crisis and the disproportionate impact methane emissions have on environmental justice communities because it forces operators to finally take methane emissions seriously. Unfortunately, the situation is dire. With each election, it is worth considering the possibility of a rule falling victim to the Congressional Review Act (CRA). According to the CRA, once a rule is finalized, it is sent to each chamber of Congress, along with a description of the rule and a proposed effective date. Congress may then review the rule and move to repeal it by vote. A repeal vote can be vetoed by the President, but Congress can override such a veto with a two-thirds vote of both chambers. To ensure the rule is as durable

as possible and avoid possible CRA scrutiny, PHMSA must finalize the Gas Pipeline Leak Detection and Repair rulemaking as expeditiously as possible.

Despite Deputy Administrator Brown's strong leadership, PHMSA is already two years past the Congressional deadline to finalize this rule. Though the Biden Administration has named this and other PHMSA rules specifically in its Methane Emissions Reduction Action Plan, it has not given PHMSA the political support or resources it needs to get this rule completed in a timely manner. Critically, many of PHMSA's top political positions are left unprecedentedly vacant, including Administrator and Chief Counsel.

Resources

PHMSA's Advanced Leak Detection & Repair Rulemaking

- [Docket for Advanced Leak Detection and Repair Rule](#)
- [Federal Register Notice for Advanced Leak Detection and Repair Rule](#)
- [PST Guide to Public Comment on PHMSA's Advanced Leak Detection Rulemaking](#)
- [PST's Comment on PHMSA's Advanced Leak Detection Rulemaking](#)

Gas Pipeline Advisory Committee (GPAC)

- [GPAC Meeting Notice](#) (part two of this meeting will be noticed soon)
- [PST's Comment on Fall 2023 GPAC Meeting](#)

General

- [Sections 113 and 114 of the PIPES Act of 2020](#) (search for "SEC. 113. LEAK DETECTION AND REPAIR." to jump to appropriate section)
- [PHMSA PIPES ACT 2020 Web Chart](#) (showing progress on congressionally required rulemakings)