



U.S. SENATE COMMITTEE ON
**COMMERCE, SCIENCE,
& TRANSPORTATION**

SECTION-BY-SECTION ANALYSIS OF THE PIPELINE SAFETY ACT OF 2025

Section 1. Short title; table of contents.

This section would provide that the bill may be cited as the “Pipeline Integrity, Protection, and Enhancement for Leveraging Investments in the Nation’s Energy (PIPELINE) to assure Safety Act of 2025” or the “PIPELINE Safety Act of 2025”. This section would also establish a table of contents for the bill.

Section 2. Definitions.

This section would define the terms “Administration”, “Administrator”, “appropriate committees of Congress”, “document produced to another person”, and “Secretary”.

TITLE I—REAUTHORIZATIONS

Section 101. Gas and hazardous liquid.

This section would authorize appropriations for the Pipeline and Hazardous Materials Safety Administration’s (PHMSA) pipeline safety programs for 5 years, from fiscal year 2026 through fiscal year 2030. The authorization would begin in fiscal year 2026 by authorizing \$222 million in user fees the agency may utilize and would increase incrementally to \$248.4 million in user fee funds for fiscal year 2030.

Section 102. Operational expenses of the Pipeline and Hazardous Materials Safety Administration.

This section would authorize appropriations for PHMSA’s operational expenses through fiscal year 2030. Such authorization would begin at \$33 million authorized for operational expenses in fiscal year 2026 and increase incrementally to \$37 million in fiscal year 2030.

Section 103. Other programs.

This section would authorize appropriations for PHMSA grant programs, including Emergency Response Grants, Pipeline Safety Information Grants to Communities, Damage Prevention Programs, and the Pipeline Integrity Program. This section would also add requirements addressing when PHMSA must publish notices of funding opportunities and make awards under the Pipeline Safety Information Grants to Communities.

TITLE II—MODERNIZING PIPELINE SAFETY

Section 201. Inspection of in-service breakout tanks.

This section would require PHMSA to revise its regulations to allow for risk-based inspections of in-service breakout tanks if the Secretary finds that such inspections maintain or enhance safety. This section would direct PHMSA to consider the American Petroleum Institute's standard entitled "Tank Inspection, Repair, Alteration, and Reconstruction" or successor regulation in its rulemaking. For any breakout tank that would be inspected less frequently under a risk-based inspection interval than under the regulations in effect on January 1, 2025, PHMSA must require operators to routinely visually monitor the external conditions of the tank and use a secondary containment system.

Section 202. Risk assessment obligations.

This section would require a DOT employee with experience in conducting risk assessments to attend PHMSA's gas and liquid advisory committee meetings in which the committee is serving as a peer review panel with respect to risk assessment information.

Section 203. Timely incorporation by reference.

This section would require PHMSA to review every 5 years each industry standard that has been adopted or incorporated into the regulations that have since been modified, and to update the regulations if such updates are determined necessary by the Secretary. The Secretary would also have to publish its reasoning for not adopting or incorporating standards it reviews. This section would direct the Secretary to consider adopting or incorporating industry consensus standards when prescribing new standards. This section would also prospectively prevent the agency from adopting new incorporations by reference if those standards are not made available on the agency's public website during the public comment period of rulemaking. Further, this section would require the Secretary to make available on PHMSA's public website links to all industry standards incorporated by reference prior to the enactment of the PIPELINE Safety Act of 2025 that are available to the public on a website at no charge to the public.

Section 204. Report on updates to the National Pipeline Mapping System.

This section would require the Government Accountability Office (GAO) to submit a report to Congress on PHMSA's management of the National Pipeline Mapping System (NPMS). This report would describe how and when PHMSA updates the high consequence area data contained in the NPMS, what sources of scientific data are used for those updates, and how such data is validated for accuracy. This section would also require PHMSA to initiate a rulemaking to ensure NPMS data that is submitted to the agency by pipeline operators has spatial accuracy within +/- 50 feet of a transmission pipeline.

Section 205. Pipeline safety enhancement programs.

This section would reauthorize the safety-enhancing testing programs authorized in the PIPES Act of 2020 for 5 years. This section would require the testing programs to be designed to achieve a level of safety equal to required safety levels. This section would also clarify that a testing program is not a major Federal action under the National Environmental Policy Act

(NEPA) statute and would prevent PHMSA from requiring testing program applicants to obtain a waiver through the non-emergency waiver process. This section would also provide an opportunity for operators to correct any identified deficiencies with their testing programs.

Section 206. Technical safety standards committees.

This section would require PHMSA to publish an explanation of why it rejects recommendations or conclusions of the gas or liquid advisory committees during rulemaking processes and to notify Congress of the agency's rationale for such rejection. This section would also amend the existing statutory language addressing the number of required committee meetings per year by replacing "up to 4" with "2" meetings per year.

Section 207. Enforcement procedures.

This section would allow the respondent in a PHMSA enforcement proceeding to request a formal hearing conducted by a DOT administrative law judge in civil penalty cases with a proposed penalty of over \$1 million. This section would also require PHMSA to respond in writing to an operator's submission in response to the agency's issuance of a warning item. This section would also require PHMSA to post notices of enforcement hearings on its website on the page titled "Upcoming enforcement hearings" and would require that formal hearings be open to the public.

Section 208. Civil penalties.

This section would increase the maximum civil penalties for violations of the Federal pipeline safety statutes and regulations. The maximum penalty amount for a violation would increase from \$272,926 (as most recently adjusted for inflation on December 30, 2024) to \$400,000, and the maximum penalty for a series of related violations would increase from \$2,729,245 (as also presently adjusted for inflation) to \$4 million.

Section 209. Improving whistleblower protections.

This section would amend the existing whistleblower protections by adding reference to additional forms of awards a whistleblower may be entitled to when prevailing in litigation, particularly back pay with interest and compensation for special damages.

Section 210. Assessment of composite materials.

This section would require PHMSA to conduct a review of available data and materials that address the safety of composite pipeline materials and submit a report to Congress describing the agency's conclusions based on that review. If PHMSA were to conclude that composite materials provide an equivalent level of safety as other pipeline materials, it could promulgate regulations allowing for the use of composite materials for the transportation of new fuels.

Section 211. Elements and evaluation of State damage prevention programs.

This section would add criteria to the minimum requirements for State one-call damage prevention programs, which States must adopt to be eligible for PHMSA's damage prevention grants. These criteria reflect best practices for one-call programs and are intended to reduce the

number of excavation related pipeline accidents and incidents. This section would also add criteria PHMSA must use to determine the effectiveness of State damage prevention programs.

Section 212. Pipeline safety voluntary information-sharing system.

This section would establish a confidential voluntary information-sharing system (VIS) program to encourage the sharing of pipeline safety data and information to improve pipeline safety. The program would bring together members from relevant Federal and State pipeline safety agencies; pipeline operator representatives; and environmental, safety, and labor groups who will analyze information received and prepare reports addressing lessons learned, process improvements, new technologies and practices, and other relevant safety information.

Section 213. Transporting gas.

This section would exclude from PHMSA's gas regulations "in-plant" pipelines that move gas within a facility that are either entirely within the facility or that extend less than 1 mile outside of the facility.

Section 214. Inspection and management of rights-of-way.

This section would codify the existing PHMSA allowance for pipeline operators to utilize unmanned aircraft systems (UAS) and satellites to conduct required visual inspections of pipeline rights-of-way. This section would not affect pipeline operators' obligation to comply with other Federal UAS laws. This section would also codify that operators may use alternative methods of maintaining vegetation along pipeline rights-of-way by utilizing guidance issued by DOT or a relevant State agency, so long as they maintain an equal level of safety. In the absence of such guidance, operators may consult industry practices and guidance for such maintenance practices but must continue to ensure that the operator can identify risks to the pipeline facility.

Section 215. Geological hazards.

This section would require operators to address geological hazards (such as landslides, volcanic activity, earthquakes, and scouring) in their integrity management plans. PHMSA would also have to prepare a report addressing geological hazards that present risks to pipeline safety. This section would require PHMSA, based on that report, to make recommendations to improve the mitigation of such hazards to Congress. PHMSA would also need to review and update, as appropriate, existing regulations and policy guidance that address the safety of pipeline facilities from threats posed by geological hazards.

Section 216. Alternative technologies.

This section would require PHMSA to issue a request for proposals for potential alternative pipeline safety technologies that, if used by pipeline operators, would meet the intent of existing pipeline safety regulations and provide an equal or greater level of safety. This section would specify that if PHMSA determines that a technology meets the intent of an existing pipeline safety regulation and provides an equal or greater level of safety, the agency may engage in rulemaking to allow operators to adopt the use of such technology.

Section 217. Fire shutoff valves.

This section would require PHMSA to study the effectiveness of fire shutoff valves or equivalent technologies to determine if they improve public safety. After completing the study, PHMSA may prescribe risk-based regulations requiring natural gas distribution system operators to install fire shutoff valves or equivalent technologies.

Section 218. Exemption from post-accident testing.

This section would require PHMSA, in consultation with the Secretary of Health and Human Services, to revise its regulations to exempt covered employees from post-accident drug and alcohol testing in cases where an employee performed the covered duties that might be related to the cause of a pipeline accident or incident outside of the time frame during which the use of prohibited drugs can be detected.

Section 219. Maximum allowable operating pressure records.

This section would require PHMSA to continue a current working group reviewing what historical pipeline testing documentation may be adequate to prove the maximum allowable operating pressure (MAOP) of older natural gas transmission pipelines. This section would require the working group to make a recommendation based on that review to PHMSA that may inform PHMSA rulemaking to revise the regulations addressing MAOP records. This section would temporarily prevent PHMSA from requiring an owner or operator of a natural gas transmission pipeline to reconfirm MAOP if the operator has records of prior testing that demonstrate the appropriate MAOP of such pipeline. This pause would be in effect until PHMSA decides whether to revise its regulations addressing the records necessary to confirm MAOP. However, this section would not amend the current deadlines by which operators must comply with MAOP reconfirmation requirements.

Section 220. Pipeline operating status.

This section would require PHMSA to complete an outstanding rulemaking from the PIPES Act of 2020 addressing safety requirements for idled pipelines within 90 days of enactment.

Section 221. Potential impact radius.

This section would require PHMSA to review the methodology used to determine the potential impact radius of natural gas transmission pipelines. As part of that review, PHMSA would need to evaluate in a report required to be submitted to Congress the available human behavior response data; accident data from pipeline incidents going since January 1, 2000; the risk of serious injury, death, or damage to property; and the unique characteristics of the gas being transported. PHMSA's review would include any applicable information and recommendations from the National Transportation Safety Board (NTSB) or the GAO on this topic. This section would also require PHMSA's Accident Investigation Division to identify the location and distance outside of a pipeline's calculated potential impact radius of any damage that it discovers during the agency's future accident investigations. NTSB made a recommendation to PHMSA regarding review of potential impact radius methodology that PHMSA has begun work on and

that this section would address. NTSB’s recommendation relates to a 2019 natural gas pipeline accident in Kentucky that resulted in a fatality.

Section 222. Effects of weather on natural gas pipelines.

This section would require PHMSA to complete a review of the effects of applicable weather events on natural gas pipeline facilities to determine whether such events pose a risk to safety. Applicable weather events include Winter Storm Uri, Winter Storm Elliott, and “major disasters” as defined in the Stafford Act that have the potential to impact the safety of a natural gas pipeline facility. After the review, PHMSA would be required to conduct a review of gas distribution integrity management plans for pipelines at increased risk from applicable weather events to ensure operators are mitigating the risks associated with the applicable weather events.

Section 223. Aldyl–A pipelines.

This section would require gas distribution operators to assess their systems for the presence of Aldyl–A pipeline components and to report the estimated total pipeline mileage of such to PHMSA within 3 years of enactment. This section would address a 2023 natural gas pipeline accident at a factory in West Reading, Pennsylvania, that resulted in seven fatalities and for which NTSB found an Aldyl–A component was a causal factor. Under this section, State programs certified by PHMSA and pipeline distribution operators’ integrity management programs, must both account for pipelines with “historic plastics with known safety issues” such as Aldyl–A. This section would also clarify that PHMSA may not require pipeline operators to conduct excavation activities for the purpose of the Aldyl–A assessment.

Section 224. Improvements to pipeline safety integrity management programs.

This section would require PHMSA to conduct research into the use of quantitative data and modeling to assess whether the use of such data or modeling in pipeline operators’ integrity management programs would improve the estimation of costs and benefits of risk reduction measures.

Section 225. Nonemergency waivers by the Secretary.

This section would set a timeline by which PHMSA shall complete a review of a special permit request or notify the applicant that PHMSA needs additional time to review. It would also require PHMSA to publicly post the reasons for granting or denying a special permit. It also would make technical changes to the statute.

TITLE III—STREAMLINING OVERSIGHT OF PIPELINES

Section 301. Regulatory updates.

This section would require PHMSA to brief Congress at specified intervals on the status of congressionally required rulemakings that have not been published by the statutory deadlines. This section would also establish that if PHMSA fails to update the status of overdue rulemakings on its public website at required intervals, the agency may not utilize any authorized or appropriated funds to support travel for the Administrator or the Deputy Administrator (except

in emergencies).

Section 302. State use of integrated inspections.

This section would allow PHMSA to establish a process for certified State pipeline safety programs to implement risk-based integrated inspection programs. Under such programs, States would use risk information and data to focus inspection resources on pipeline facilities and regulatory requirements that have the highest priorities during an inspection. PHMSA would be required to review and approve or deny a State's application to conduct such a risk-based program and may terminate the authority if the Secretary determines that a State authority is not adequately carrying out the program. Three years after the date on which a State's risk-based inspection program is approved, the DOT Inspector General would need to review such program to evaluate its safety impacts and notify the Secretary and Congress if the Inspector General determines a risk-based integrated inspection program is not adequate.

Section 303. Optimizing pipeline safety inspections.

This section would require the GAO to evaluate the inspection scheduling and coordination practices and procedures between PHMSA, State authorities, and uncertified State authorities. GAO's report would include recommendations for improving inspection practices and procedures without compromising pipeline safety and would be required to be submitted to Congress. This section would also require PHMSA to publish annually a summary of Federal and State inspections conducted each year, including any enforcement actions taken.

Section 304. Sense of Congress on PHMSA engagement prior to rulemaking activities.

This section would state it is the sense of Congress that, where appropriate, PHMSA should engage with a broad range of pipeline stakeholder groups, including State pipeline safety programs, during the pre-drafting stages of rulemaking activities.

TITLE IV—IMPROVING SAFETY OF EMERGING GASES

Section 401. Studies of hydrogen pipeline transportation.

This section would require PHMSA to engage a National Laboratory to conduct a study of the safety, technical, and practical considerations of blending hydrogen into existing natural gas systems and to report its findings to Congress. This section would also require the GAO to study existing natural gas distribution systems that utilize hydrogen-natural gas blending applications to identify processes, materials, and standards that operators have implemented to operate those systems safely. After completion of the studies, PHMSA would be required to determine whether any updates to regulations are necessary to ensure the safety of natural gas distribution systems that intentionally blend hydrogen at levels exceeding 5 percent. If PHMSA were to determine a rulemaking is not necessary, the agency would need to report its rationale to Congress.

Section 402. Safety of carbon dioxide pipelines.

This section would require PHMSA to publish a rule updating pipeline safety requirements to ensure the safe transport of carbon dioxide in all phases, including gaseous, liquid, and

supercritical States. The rule required under this section would need to include appropriate requirements addressing updates to emergency response plans to address any risks unique to carbon dioxide pipeline accidents or incidents, minimum safety standards addressing vapor dispersion modeling to identify high consequence areas, and share information with State, local, and Tribal emergency response organizations on any risks unique to carbon dioxide incidents. The final rule would also need to consider safety-related conditions reporting appropriate to any unique safety risks associated with transporting carbon dioxide. This section would also require PHMSA to engage a National Laboratory to conduct a study addressing the use of odorants in carbon dioxide pipelines. PHMSA would also be required to provide information to relevant emergency responders that is tailored specifically to carbon dioxide pipeline releases. In part, this section would address risks presented by carbon dioxide pipeline releases, whereby when released, it turns into an odorless gas that may travel close to the ground. In 2020, a pipeline rupture in Sartoria, Mississippi, resulted in 45 people being taken to the hospital. PHMSA was required to address the safety of gaseous carbon dioxide pipelines in the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, but never published the required rulemaking. The rulemaking required under this section would also satisfy that outstanding 2011 provision.

Section 403. Reporting of blended products.

This section would require natural gas pipeline operators to not less frequently than annually report to PHMSA the intentional blending of over 2 percent by volume of non-predominant products. This section would allow PHMSA to collect additional information about the blending of hydrogen into natural gas distribution systems.

TITLE V—IMPROVING EMERGENCY RESPONSE AND TRANSPARENCY

Section 501. Bitumen oil response plan review.

This section would require the DOT Inspector General to review pipeline operators' oil spill response plans for spills of diluted bitumen. The Inspector General would need to review whether plans include the information necessary to properly respond to a spill, as well as the findings from a 2013 DOT study addressing the transportation of bitumen required by the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011. This section would require the DOT Inspector General to submit a report to Congress that summarizes the findings of its review and contains any recommendations for response to bitumen spills to the appropriate committees of Congress.

Section 502. National Center of Excellence for Hazardous Liquid Pipeline Leak Detection.

This section would allow PHMSA to establish the National Center of Excellence for Hazardous Liquid Pipeline Leak Detection (Center of Excellence). The primary purpose of the Center of Excellence would be to conduct research aimed at improving leak detection for hazardous liquid pipelines. The Center of Excellence would be established in a State within the Great Lakes Basin that has an international crude oil pipeline crossing through an adjacent Great Lake and which is near a university with pipeline safety expertise. This section would

require PHMSA to submit a report to Congress addressing the resources necessary for its establishment and describing how its functions would be carried out before establishing the Center of Excellence.

Section 503. Operator financial disclosure.

This section would require pipeline operators filing for bankruptcy to notify PHMSA of such filing within 7 days.

Section 504. Data and transparency.

This section would require PHMSA to publish on its website 1 year after the date of enactment and then not less frequently than annually summary data of the leaks annually reported by operators.

Section 505. Office of Public Engagement.

This section would authorize PHMSA to establish an Office of Public Engagement that would be staffed with the agency's current community liaison employees. This section would explicitly describe in statute the Office of Public Engagement's role and duties. Such duties would include: conducting outreach about pipeline safety-related matters; making educational materials available addressing PHMSA jurisdiction and responsibilities as related to other agency's pipeline-related equities; holding public meetings; and generally assisting individuals in resolving pipeline safety inquiries.

Section 506. Clarification of confirmed discovery.

This section would require PHMSA to review the definition of "confirmed discovery" that triggers pipeline operators' required reporting of accidents and incidents to the National Response Center (NRC). PHMSA would also review historical records to evaluate the timeframes within which past accident reporting to the NRC has occurred. PHMSA would have to submit a report to Congress that provides the findings of its review. This section would also allow PHMSA to consider reducing civil penalties against operators who report incidents within 10 minutes of a suspected release, or who voluntarily engage in the emergency notification system addressed by section 507 to provide timely public alerts.

Section 507. Public alert notification system for pipeline facilities.

This section would require DOT and the Federal Emergency Management Agency to develop voluntary guidance to assist owners and operators of pipeline facilities in coordinating with State, local, Tribal, and territorial governmental entities to make use of existing public alert notification systems, such as the Integrated Public Alert and Warning System, in the event of a pipeline emergency. This section would also require that any relevant procedures voluntarily established by an operator be incorporated into the operator's response plans.

TITLE VI—OTHER MATTERS

Section 601. Prohibition on PHMSA operation, procurement, or contracting action with respect to covered unmanned aircraft systems.

This section would prohibit PHMSA from operating or procuring UAS from a “covered foreign country.” Any UAS PHMSA uses would have to be manufactured in the United States. This section would require PHMSA to submit a report to Congress generally addressing the status of its UAS use and any changes it has made to its UAS program to comply with the requirements of this section.

Section 602. Natural gas distribution pipeline infrastructure safety and modernization grants.

This section would authorize \$75 million for fiscal years 2027 through 2030 for PHMSA’s Natural Gas Distribution Infrastructure Safety and Modernization (NGDISM) program. The NGDISM program was created by an appropriation in the Infrastructure Investment and Jobs Act¹⁶ but has never been authorized. Under this section, community- or municipality-owned natural gas distribution operators would be eligible to apply for grants to repair or improve natural gas distribution systems for the purpose of improving safety.

Section 603. Issues affecting federally recognized Indian Tribes.

This section would update various existing provisions in the Federal pipeline safety laws to add references to Tribal notice, consultation, and coordination. This section would attempt to place Indian Tribes on equal footing with other State, local, and Federal Government entities where referenced throughout the code as appropriate and would require that notifications made to other relevant governmental entities are also made to affected Tribes.

Section 604. Identification of and justification for redactions.

This section would require that if PHMSA redacts any portion of a document produced to another person, including the relevant congressional committees of jurisdiction, that the agency must cite a specific statute authorizing the withholding of the information redacted.

Section 605. Fees for loan guarantees.

This section would authorize the Secretary of Energy to collect fees from qualified project applicants to cover the administrative expenses incurred by the Department of Energy to administer loan guarantees for liquefied natural gas projects from Alaska.

Section 606. Improving pipeline cybersecurity.

This section would require the Transportation Security Administration (TSA) to publish a final rule related to the cybersecurity of pipelines, for which TSA has already issued a proposed rulemaking. A 2023 ransomware attack on Colonial Pipeline shut down a pipeline responsible for transporting a significant portion of the fuel consumed on the East Coast. In response, TSA created temporary cybersecurity requirements. This section would require TSA to publish a final rule promulgating cybersecurity requirements to protect against future cyber attacks.

Section 607. Technical corrections.

This section would include various technical corrections to ensure proper formatting and cross-

references of the definitions section in 49 U.S.C. 60101(a). This section would also delete a reference to a report that was required to be submitted to Congress 25 years ago.