BLUEGREEN ALLIANCE

CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

August 4, 2025

Department of Transportation
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Avenue SE
Washington, DC 20590-0001

Docket number PHMSA-2025-005

RE: Pipeline Safety: Mandatory Regulatory Reviews to Unleash American Energy and Improve Government Efficiency (RIN 2137-AF73)

The BlueGreen Alliance (BGA) unifies labor unions and environmental organizations into a powerful force to fight climate change, protect the health of people and the environment, stand against economic and racial inequality, and create and maintain good-paying, union jobs in communities across the country. We write to urge the Pipeline and Hazardous Materials Safety Administration (PHMSA) to seek opportunities to strengthen pipeline safety and protect workers, communities, and the environment as they review pipeline regulations.

Our nation's energy workers have made significant strides to increase the efficiency of gas and oil systems in recent years. However, emissions of methane and other pollutants continue to harm the economy and the environment by jeopardizing the health of workers and communities, wasting resources, and worsening climate change. Strong safety regulations can reduce emissions from this sector and can significantly improve air quality for workers and communities, preventing 255,000 premature deaths and more than half a million asthma-related emergency room visits globally each year.[i]

Certain common-sense regulatory updates can similarly enhance worker, environmental, and community safety for carbon dioxide (CO2) pipelines, which climate models predict will need to increase by orders of magnitude from their current deployment across the United States in the coming years.[ii]

CO2 pipeline operators should be required to adhere to stringent safety regulations, including regular monitoring and maintenance of their pipelines. PHMSA should enact new rules that are strong and comprehensive enough to prevent disasters before they happen. Appropriately protective safety standards provide an opportunity for communities, industry, labor unions, and environmental advocates to align on win-win regulatory updates.

To that end, BGA offers the following responses to the questions posed in the advance notice of proposed rulemaking.

Pipeline Safety Regulations (49 CFR Parts 190[iii] and 191[iv] Through 199[v])

6. Are there any material, design, testing, construction, or corrosion control requirements in parts 192 (subparts B through I), 193 (subparts C through E), and 195 (subparts C through E and H) of the Pipeline Safety Regulation that impose an undue burden on affected stakeholders? Please identify any specific regulatory amendments that PHMSA should consider, as well as the technical, safety, and economic reasons (include a description and number of the affected pipeline facilities) supporting those recommended amendments.

Replacing Pipes Known to Leak with Reliable Materials

When replacing aging and leak-prone pipelines, PHMSA should encourage operators to utilize protected steel for its efficiency and environmental benefits. According to a report from Global Efficiency Intelligence (GEI), the United States has among the cleanest steel in the world and has the lowest carbon intensity among the top steel-producing nations.[vi]

Pipes made of domestically sourced steel offer a low-carbon alternative for replacing pipes while offering better performance and durability. Steel pipes with composite liners were shown to have more protection and offer less permeation than pipes with polymer-based liners, which degrade over time.[vii] PHMSA should consider elevating the efficiency of using protected steel in pipeline replacements over other, less resilient materials to ensure that operators utilize the best resources for avoiding fugitive emissions. By encouraging operators with aging pipelines to source steel from American manufacturers, PHMSA would be securing a win-win-win situation, creating good-paying jobs for American workers, utilizing cleaner materials for pipeline infrastructure, and mitigating future fugitive emissions.

Mitigating Leaks with U.S.-made Equipment

Leak detection and repair standards would also lead to the creation of high-quality, good-paying jobs in the manufacturing sector. The equipment necessary for finding and fixing leaks in natural gas infrastructure is American-made and driving the rapid growth of the methane mitigation industry. Today there are 88% more firms manufacturing methane mitigation technologies than in 2014, and 105% more firms providing installation and other services than in 2017:

- At least 268 firms manufacture methane mitigation equipment in the United States and/or offer services;
- A majority of methane mitigation firms qualify as small businesses, employing fewer than 50 workers;
- Methane mitigation companies provide U.S. jobs in at least 1,040 locations across 47 states; and
- The methane mitigation industry employs at least 35 key job types.[viii]

Much of the technology that can modernize America's pipeline infrastructure has existed for decades and is supported by an active supply chain. A Datu report identifies 1040 employment locations (referred to in the report as "employee locations") for manufacturing, assembling, and providing installation and other services for methane mitigation technologies that could help reduce leaks.[ix] For example, fixed sensors are allowing for continuous monitoring of leaks when deployed to high-risk areas. When a leak is detected, monitors can use optical gas imaging (OGI) or infrared lasers to detect specific malfunction equipment or pinpoint the location of a pipeline leak.

While unionized workers at some companies already do this work, the prospect of capturing additional gas with available and cost-effective mitigation technology could improve with a larger market and level regulatory playing field among energy companies.[x] The gas pipeline leak detection and repair standards promulgated by PHMSA would support adoption of these technologies by operators controlling pipeline leaks. Given the accessibility of cost-effective technologies to detect and repair fugitive emissions, a wide-reaching standard in place also provides an opportunity for companies to innovate in methane mitigation technology and strategies and provides greater regulatory certainty for the industry over the long run.

8. Are there any personnel qualification and training requirements in parts 192 (subpart N), 193 (subpart H), and 195 (subpart G) of the PSR that impose undue burdens on affected stakeholders? Please identify any specific regulatory amendments that PHMSA should consider, as well as the technical, safety, and economic reasons (include a description and number of the affected pipeline facilities) supporting those recommended amendments.

Utilizing a properly trained, skilled workforce can increase the safety of pipeline projects while improving their quality and durability. Labor unions have long led the way in training workers to safely complete these projects, and union-affiliated training programs are the gold standard in creating a skilled, safe workforce. Union-affiliated training programs, such as Registered Apprenticeships and Pre-Apprenticeships, empower businesses with a well-trained workforce, ultimately driving efficiency and success in tight labor markets. A 2022 study examined the costs, benefits, net benefits, and ROI that employers gain by investing in the American Apprenticeship Initiative (AAI) apprenticeship programs. The median estimate of the employer's return on investment in registered apprenticeship is 44.3%. This means that for every dollar invested in the apprentice, the employer ultimately earns $1.44 in benefits on average.[xi]
Unionized worksites are also significantly safer than their non-union counterparts. A 2021 analysis of OSHA inspections of construction sites found that union worksites are 19% less likely to have an OSHA violation and have 34% fewer violations per inspection.[xii] The Center for Construction Research and Training's 2017 survey of 334 firms found that construction firms with union workers were far more likely to engage in safety practices than those with non-union workers, such as performing job hazard analyses and having a site-specific safety and health

plans.[xiii] Site-specific plans are especially important when transporting materials like CO2, which pose unique risks in the event of a safety incident, where clear safety protocols must be followed to protect both community members and workers in the event of a rupture.

As such, PHMSA should institute new safety rules that require specific emergency response training for CO2 pipelines. In the event of a pipeline rupture, CO2 can pose a serious threat to human health and raise unique challenges for first responders. CO2 is heavier than air and can settle in low-lying areas, displacing oxygen and acting as an asphyxiant. This displacement of oxygen can also render internal combustion engines inoperable, potentially hindering evacuation and emergency response efforts. This raises challenges that first responders must be prepared for. Pipeline operators and PHMSA should work with local officials to develop emergency response plans and require proper training for first responders near CO2 pipelines.

Developers must work closely with local elected officials and other community leaders to ensure that important safety information is adequately disseminated, and that substantial community input helps shape the development of these safety plans. New pipeline development projects should assess all potential effects of the project on the community, determining the specific needs and priorities of the community impacted by the project.

9. Do any of the integrity management requirements in part 192 (subparts O and P) or 195 (§§ 195.450 through 452) impose an undue burden on affected stakeholders? Please identify any specific regulatory amendments that PHMSA should consider, as well as the technical, safety, and economic reasons (include a description and number of the affected pipeline facilities) supporting those recommended amendments.

Under 49 CFR Part 195.2, PHMSA has the authority to regulate CO2 pipelines, but CO2 is defined as "a fluid consisting of more than 90 percent carbon dioxide molecules compressed to a supercritical state." This means that PHMSA does not currently regulate pipelines that transport CO2 as gas or subcritical liquid, even though Congress expressly gave PHMSA the authority to do so in section 15 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011. Though nearly all CO2 pipeline transportation occurs in a supercritical state, it is important that this regulatory gap be closed. PHMSA safety guidelines should remove any ambiguity that may restrict PHMSA rules only to CO2 in a supercritical state. PHMSA must ensure that all CO2 phases, including gas and liquid, are clearly included under their regulatory authority.

Conclusion

By enacting robust pipeline safety regulations, particularly those concerning CO2 pipelines and the utilization of domestically sourced, protected steel, PHMSA can significantly enhance worker, community, and environmental safety while simultaneously fostering economic growth through the creation of good-paying American jobs. Prioritizing comprehensive leak detection and repair standards, supported by a thriving U.S. methane mitigation industry, and ensuring thorough emergency response training for CO2 pipeline incidents will not only mitigate environmental harm

and health risks but also establish a clear and stable regulatory environment for industry innovation. Ultimately, strengthening pipeline safety regulations offers a crucial opportunity for a win-win-win outcome, aligning the interests of communities, industry, labor, and environmental advocates to achieve a safe and more prosperous future.

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[ii] Princeton University, *Net Zero America, Pillar 4: CO2 capture, transport, and utilization or geologic storage*, 2021. https://netzeroamerica.princeton.edu/the-report

[iii] Code of Federal Regulations (CFR), Pipeline Safety Part 190—Pipeline Safety Enforcement and Regulatory Procedures. https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-D/part-190

[iv] CFR, Pipeline Safety Part 191—Transportation of Natural and Other Gas by Pipeline; Annual, Incident, and Other Reporting. https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-D/part-191

[v] CFR, Pipeline Safety Part 199—Drug and Alcohol Testing. https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-D/part-199

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