



December 5, 2023

Chair Graves, Ranking Member Larsen, Subcommittee Chair Nehls and Ranking Member Payne  
Transportation and Infrastructure Committee  
2165 Rayburn House Office Building  
Washington, DC 20515

**Re: Protect Communities from Dangerous Pipelines**

Dear T&I Leadership:

H.R. 6494, the Promoting Innovation in Pipeline Efficiency and Safety Act of 2023, is a positive first step toward adequate regulation of carbon dioxide pipelines, but as drafted it fails to include needed enhanced safety standards to protect Americans from the dangers of the proposed massive buildout of carbon dioxide pipelines. Worse, it threatens to hide the risks of these dangerous pipelines from the public.

We appreciate the bill's new definition of "carbon dioxide" to mean "a product stream consisting of more than 50 percent carbon dioxide molecules in any state of matter except solid." The current statutory language refers only to liquid and gaseous carbon dioxide, thereby omitting to include supercritical carbon dioxide. Since the pipeline industry has stated a preference to ship carbon dioxide in a supercritical state, the proposed new definition closes an important jurisdictional gap. We also appreciate the extension of federal pipeline safety jurisdiction to carbon dioxide storage facilities used during transportation. These provisions are critical because carbon dioxide pipeline infrastructure should not fall through jurisdictional gaps.

We also appreciate that Section 25(a)(6)(E) requires carbon dioxide pipeline operators to employ "vapor dispersion modeling" when identifying "high consequence areas." This requirement will help protect communities through enhanced inspection and maintenance of operating pipelines. This being said, dispersion modeling is also critical for new carbon dioxide pipeline routing decisions, which are within state and/or local jurisdiction, and for local emergency response planning by response agencies and at-risk individuals, families, businesses, and communities.

The bill also requires that pipeline operators consider topography, atmospheric conditions, pipeline operating characteristics, and the impact of additional substances in product streams that could affect vapor dispersion in their modeling. Essentially, this new safety standard requires that pipeline operators use computation fluid dynamic modeling, because it is the only type of modeling capable of considering all of these factors. We support use of such modeling, because it is the best available – and our communities deserve the best. This being said, we suggest that the H.R. 6494 be amended to also require consideration of the effect of vegetation on plume dispersion. It has been proven that vegetation, such as forests and tall row crops can have a substantial impact on plume dispersion. Since software exists to take account of the impact of vegetation, we request that this factor be included.

Unfortunately, H.R. 6494 grants PHMSA discretion to reject "public" requests for dispersion modeling output. In particular, the bill authorizes PHMSA to withhold from the public:

- (i) security sensitive information related to strategies for responding to worst-case carbon dioxide release scenarios;
- (ii) security sensitive information related to carbon dioxide release plumes; and
- (iii) security sensitive information related to plans for responding to a carbon dioxide release.

If PHMSA withholds such information, then at-risk persons, families, businesses, and communities would not be able to know the degree of risk they face in the event of a rupture, nor would they be able to plan for how to respond in the event of a rupture.

The degree of risk to human health from a pipeline rupture could range from minor discomfort to almost certain rapid death, depending on the size of a rupture, the distance of a person from the rupture, and other factors. This risk cannot be easily determined absent access to dispersion modeling. Withholding dispersion modeling from the public means that individuals, families, and businesses would have no reasonable ability to plan for a carbon dioxide pipeline rupture, and instead would be entirely dependent on local emergency response agency planning and rapid rescue capacity. In many rural areas, local emergency response agency capacity is limited and response times may be high due to their reliance on volunteers and travel distances. While we are deeply appreciative of our first responders, we also believe that their jobs are made much easier when the public is informed and prepared to respond to emergencies. Thus, Congress should empower individuals, families, and businesses with the plume dispersion modeling output needed to protect themselves from carbon dioxide pipeline ruptures – not keep them ignorant of the risks.

Accordingly, HR 6494's "protection of sensitive information" language should be stricken. This language is unnecessary and harmful for the following reasons:

- 1) **May restrict local first responder access to pipeline operator dispersion modeling** – H.R. 6494 fails to define what is meant by a "public request," which could be interpreted to include requests for dispersion modeling output by state and local emergency response agencies, which would almost always be the first emergency personnel on-scene following a rupture. Such local agencies have independent jurisdiction to plan for and respond to carbon dioxide pipeline ruptures. H.R. should guarantee that state and local first responders have access to pipeline operator dispersion modeling, not put into doubt their right to this critical information.
- 2) **Fails to recognize that at-risk individuals, families, businesses, and communities have a critical need for dispersion modeling for their response planning** – H.R. 6494 authorizes PHMSA to withhold "information related to strategies for responding to worst-case discharges," and "information related to plans for responding to a carbon dioxide release," meaning that PHMSA could prevent at risk persons, families, and businesses from accessing the information they need to know how to develop response strategies, whether by planning an evacuation route, sheltering in place, purchase of self-contained breathing apparatus, or other approaches. Absent access to dispersion modeling, at-risk persons would not be able to know the potential carbon dioxide concentration at particular homes and businesses following a rupture, and therefore they would not be able make reasoned response choices. This language would also allow

PHMSA to withhold information from state and local first responders for use in the preparation of local emergency response plans. At-risk individuals, families, businesses, communities, and local first responders actually have a much greater need for dispersion modeling information and emergency planning than do PHMSA and pipeline operators, because nearby individuals and first responders will have their lives on the line. In contrast, pipeline employees and contractors and PHMSA staff should be expected to arrive on-scene after carbon dioxide plumes have started to disperse – long after self and first responder rescues have begun. PHMSA and pipeline operators are not the only entities that need to know the risks created by and plan for carbon dioxide pipeline ruptures.

- 3) **Similar danger zone information is already available for natural gas pipelines** – Both PHMSA through its potential impact radius formula, 49 C.F.R. § 192.3 (definition of potential impact radius) and the Department of Housing and Urban Development, through its acceptable separation distances regulation, 24 CFR Part 51 Subpart C, have for decades publicly provided methodologies for estimating potential impact zones in the event of a natural gas pipeline rupture. It makes no sense to provide public tools to estimate the danger zones for natural gas pipeline but prevent the public from knowing similar information for carbon dioxide pipelines.
- 4) **Hinders personal and community emergency response planning** – Pipeline safety is enhanced by empowering at-risk persons to know how to respond and protect themselves in the event of a carbon dioxide pipeline rupture. Those threatened by carbon dioxide pipeline ruptures want to fully understand the risks they face and to have an active role in deciding how to protect themselves, their families, and employees. They do not want to be designated victims. Pipeline operators and PHMSA do not have the jurisdiction or capacity to prepare response plans for the thousands of individuals, businesses, and communities along pipeline routes. Instead, such planning properly is shared among local first responders and those who live and work in their jurisdictions. Withholding dispersion modeling output from the public will only increase ignorance of risks and hinder local emergency response planning, thereby increasing the potential for confusion and poor response decisions in the event of a carbon pipeline rupture.
- 5) **Does not prevent public use of dispersion modeling, because the software and data needed to conduct dispersion modeling is either public information or subject to reasonable estimation** – Computational fluid dynamic dispersion modeling software is publicly available, and all of the data inputs for dispersion modeling (pipeline diameter, segment length between valves, pipeline operating pressures and temperatures, topography, weather, and vegetation types) are public information or can be readily estimated. Therefore, it is entirely possible for local first responders and citizens to prepare their own plume dispersion modeling independently of pipeline operators. If all the information that needed to run a dispersion model is public, the output should also be public. Withholding pipeline operator dispersion modeling would merely force local citizens and first responders to pay for their own modeling and result in redundant modeling efforts. If company dispersion modeling output is based on publicly available information, then the output should also be public information.

- 6) **Plume dispersion modeling does not contain information that is useful for terrorism --**  
Dispersion modeling is used to provide a reasonable conservative estimate of the worst-case danger zone. It does not predict the likely spread of carbon dioxide at an actual rupture. In an actual rupture, the carbon dioxide plume could be dispersed quickly by wind, be blown in a non-threatening direction, or contain much less carbon dioxide due to pipeline operating conditions. Therefore, a release of dispersion modeling would not provide any useful targeting information. Instead, dispersion modeling is useful only for emergency response planning and to limit the potential harm caused by terrorist attacks.
- 7) **Pipeline operator dispersion modeling should be subject to critical review by local communities to ensure the use of reasonable and accurate assumptions and data on the current and future locations of at-risk communities –** Dispersion modeling output depends on the reasonableness of the assumptions and data input into the model. It is entirely possible for a pipeline operator to choose assumptions so that modeling underestimates worst-case impacts. Moreover, it is entirely possible that pipeline operators might fail to identify at-risk individuals, families, and businesses, including both those that currently exist and those that will exist as our communities grow. It is not reasonable to assume that pipeline operators will accurately identify all current and future at-risk persons, such that the assumptions and data used by operators in their dispersion modeling should be subject to regular review by at-risk communities.
- 8) **Sensitive information is already protected by FOIA Exemption 1 –** H.R. 6494 fails to recognize that all public requests to PHMSA would be subject to FOIA restrictions, including FOIA Exemption 1 and Executive Order 12958, which protect national security information. Federal law already provides PHMSA with discretion to withhold information that truly puts Americans at risk. There is no reason give PHMSA new overly broad and vague language allowing it to withhold this critical information. Moreover, allowing PHMSA to declare that dispersion modeling must be secret will chill state, local, and community efforts to use dispersion modeling in local emergency response planning.
- 9) **Fails to provide meaningful standards or a process to withhold modeling –** The proposed language appears to authorize PHMSA to make exclusion decisions on an *ad hoc* basis without guidance from Congress or a requirement to conduct a rulemaking so that stakeholders are able to explain why they need access to company dispersion modeling. Absent more guidance, Congress cannot know how draconian PHMSA will be with its exclusions.

Instead of recognizing that public safety considerations demand public disclosure of plume dispersion modeling, H.R. 6494 would allow PHMSA to hide this modeling from the public and thereby make communities less safe. Despite industry claims that disclosure of this information is unsafe due to its possible though unlikely use by terrorists, disclosure of dispersion modeling would provide little to no benefit to terrorists. Instead, such disclosure would reduce the impact of a terrorist event by supporting effective emergency response by individuals, families, businesses, and local agencies. Congress should protect their communities by providing critical information to them, not keep them in the dark.

Finally, Congress should understand that the lion's share of H.R. 6494's proposed carbon dioxide pipeline amendments are technical amendments without substantial effect. Most of these simply include the

words “carbon dioxide” in existing law to clarify that these pipelines are regulated. See, for example, H.R. 6494 Section 25(a)(1) to (5). While perhaps adding some clarity, such proposed amendments will have little to no practical impact because Congress already requires that PHMSA regulate liquid carbon dioxide pipelines as “hazardous liquid” pipelines, 49 U.S.C. § 60102(i)(1), and authorizes PHMSA to regulate gaseous pipelines. 49 U.S.C. § 60102(i)(2). Moreover, with regard to supercritical and liquid carbon dioxide pipelines, PHMSA and the carbon dioxide pipeline industry have both repeatedly asserted that all liquid and supercritical carbon dioxide pipelines are regulated under existing law, and the carbon dioxide pipeline industry has acceded to federal pipeline safety jurisdiction. Therefore, Congress should understand that such technical amendments do not extend federal jurisdiction or create any new substantial statutory protections for the public.

Finally, H.R. 6494 does not address a number of critical matters, including:

- eliminating or moderating the unique cost-benefit analysis requirements in 49 U.S.C. § 60102 that overly prioritize company expenses and deprioritize public safety;
- a requirement for new high consequence area safety standards for carbon dioxide pipelines, because the current standards were written primarily to protect waterbodies from oil spills, such that they do not adequately protect individuals, families, and communities from carbon dioxide plumes;
- establishment of clear authority and safety standards related to contaminants in carbon pipelines and all of the equipment used to mitigate the impact of contaminants, including standards for contaminant monitoring and removal before and during pipeline transportation;
- increased funding support and deadlines for identifying and requiring use of odorants in all carbon dioxide pipelines; and
- improved safety incident release reporting standards, because current carbon dioxide incident reporting standards are based on a release of product in liquid form, whereas carbon dioxide converts to a gas immediately upon release, thereby creating ambiguity when determining if a release is sufficiently large to report; and
- remote monitoring of and reporting on fugitive emissions from pipeline infrastructure, which is necessary because leak detection technology installed within pipeline systems cannot detect very small leaks.

H.R. 6494 is a productive first step toward protecting the public from carbon dioxide pipeline ruptures, but we urge you to ensure that our families and businesses have the plume dispersion modeling they need so they are able to help protect themselves.

Thank you for your consideration.

Very truly yours,



Paul Blackburn