PREVENTING PIPELINE HARMS

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WHY IT MATTERS

Fracked-gas pipeline construction is expanding rapidly across the Southeast, even as clean energy sources, like solar and battery storage, offer more reliable and cost-effective energy generation.[1] Overbuilding fossil fuel infrastructure is at odds with a healthy environment and future for the Commonwealth and runs counter to climate mitigation measures recommended by the **Intergovernmental Panel on Climate Change (IPCC).**[2] Pollution from fossil fuel infrastructure impedes Virginia's ability to meet climate goals, and the resulting air and water pollution tend to fall disproportionately on communities of color, households of low income, and elderly communities.[3]

Specifically, the construction of new methane-gas pipelines further traps Virginia into risky dependence on fossil fuels. Gas pipelines pose enormous safety risks for those along their routes and within evacuation or **blast zones**.[4] Construction of pipelines in very close proximity to existing pipelines, or co-location, increases the safety risk should a leak or explosion occur. The operation of these facilities is associated with the emission of methane, a potent greenhouse gas, as well as downstream carbon dioxide emissions and releases of volatile organic compounds and toxic substances like benzene and formaldehyde during compressor station blowdowns.[5] These emissions pose serious consequences to the climate, environment, and nearby communities. Virginia communities bear the brunt of negative public health impacts to water and air quality, economic harm to farmland and other critical agricultural lands, and the threat of explosive high-pressure pipes routed through their neighborhoods.

CURRENT LANDSCAPE

Virginia is home to a large network of fracked-gas pipelines. Recently completed and proposed projects bring significant harm and risk to communities. During and after its construction, the **Mountain Valley Pipeline (MVP)** in Southwest Virginia damaged fragile water resources and ecosystems. MVP has accrued over 350 violations of water quality protections in Virginia, revealing deficiencies in existing erosion and sediment control requirements.[6] The pipeline's construction also damaged Indigenous cultural and sacred sites and adversely impacted rural communities and residents' livelihoods.[7,8] The use of degraded construction materials; the pipeline's route through steep slopes, fragile **karst** areas, and seismic zones; and the lack of **odorant** in the line add to the risk of failure or explosion during operation.[9] MVP was allowed to complete construction due to unprecedented congressional interference that attached the pipeline's completion to an unrelated budget bill in 2023, and federal efforts to circumvent important permit review processes are currently intensifying.[10]

Three major pipelines are now proposed for Southside Virginia, all beginning at a fracked-gas compressor station terminus in Chatham, VA. MVP has proposed the Southgate extension, a high-capacity pipeline that would extend into North Carolina.[11] Transcontinental Gas Pipe Line Company, LLC, a Williams Companies subsidiary, wants to expand its network of pipelines with the 54-mile Southeast Supply Enhancement Project into North Carolina, and the recently proposed Power Express pipeline, which would travel north to the Maryland border.[12,13]

The yearly emissions from these proposed pipelines would add 41 million metric tons of greenhouse gas emissions, equivalent to over 9.6 million gas-powered cars.[14] The climate impacts from greenhouse gas emissions are felt widely through intensified weather and recurrent flooding in both coastal and inland areas of Virginia. Adding new gas infrastructure impedes Virginia's climate progress.

OPPORTUNITIES

Projects like the Mountain Valley Pipeline have demonstrated that existing laws and regulations do not adequately protect water resources, public health, or the environment from the construction of new fossil fuel infrastructure. Ongoing issues with the MVP also highlight the dangers of construction in fragile karst landscapes and through seismic zones. This reinforces the importance of state agencies hearing from local communities about the real-world impacts they experience from pipeline construction.

Absent a ban on intrastate pipelines, any new fossil fuel pipeline build-out, including both interstate and intrastate pipelines, must fully engage and respect the public's views and interests. Increased outreach from state agencies to impacted residents at the start of review processes and during a project's construction would both strengthen local participation in those reviews. It would also increase agencies' abilities to identify potential concerns in determining whether projects should be approved and more effectively address environmental violations during construction. This could help both protect sensitive waterways in the proposed path of a pipeline and place greater emphasis on a project's health and environmental impacts.

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Bonding requirements to appropriate funding or insurance coverage for pipeline construction and land restoration would provide additional assurances that localities are not burdened with additional costs because of a pipeline project. Improvements in pipeline leak detection, like the use of odorant or a chemical additive that identifies gas leakage in all pipelines regardless of size, would strengthen safety measures for the public.

Enforcement of pollution laws must be prioritized, and companies must be held fully accountable for the impacts of their infrastructure, regardless of project completion or abandonment.

TOP TAKEAWAYS

Construction of new methane-gas pipelines can result in damage to waterbodies, fragile ecosystems, and neighbors' properties and safety. Emissions from operational pipelines harm the health of nearby communities.

Methane-gas pipelines are proposed and built without bonding or safety funding requirements, which can leave communities and local emergency services footing the costs if a pipeline is abandoned. A lack of odorant in larger transmission pipelines increases the risk of an undetected leak, which could cause explosions.

Communities are often left without proper notice of surveying, route changes, permit review, and safety testing dates for pipeline projects.

ENDNOTES

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