

PREVENTING PIPELINE HARMS

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WHY IT MATTERS

Fracked-gas pipeline and compressor station construction is expanding rapidly across the Southeast, even as clean energy sources, like solar and energy storage, offer more reliable and cost-effective energy solutions.¹ Overbuilding fossil fuel infrastructure is at odds with a healthy environment and climate goals, and locks the Commonwealth into decades of unaffordable energy.

Air and water pollution from pipelines and other fossil fuel infrastructure tends to fall disproportionately on communities of color, households of low income, and elderly communities.² Rural Virginia communities bear the brunt of the negative economic and social impacts of pipelines, including harm to farmers through the loss of livestock³ and damage to crop and pasture lands. During and after its construction, the **Mountain Valley Pipeline (MVP)** in Southwest Virginia accrued over 425 violations of water quality protections in Virginia, revealing deficiencies in existing erosion and sediment control requirements.⁴

Gas pipelines pose enormous safety risks for those along their routes and within evacuation or **blast zones**.⁵ 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, negatively impacting local air quality.⁶

CURRENT LANDSCAPE

Virginia is home to a large network of fracked-gas pipelines, and four major projects are now proposed or under construction. In Southside, **MVP Southgate extension** and Transcontinental Gas Pipe Line Company's **Southeast Supply Enhancement Project** are both under construction and share parallel routes. Both projects are currently subject to legal challenges. An additional proposed pipeline, **Power Express**, would travel north to the Maryland border to serve data center demand primarily, if approved.^{7,8} In Accomack County, an additional 48.5 mile pipeline is proposed.⁹

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.¹⁰ The record on MVP also shows that water and land pollution will harm areas along pipeline routes.

Further pipeline construction threatens Indigenous cultural and sacred sites and adversely impacts rural communities, natural resources, and residents' livelihoods.^{11,12} Despite a new Virginia law requiring advanced leak detection and increased inspections,¹³ serious safety concerns remain, especially in areas with steep slopes, fragile **karst** terrain, and seismic zones. The lack of odorant in the lines can add to the risk of explosion during operation.¹⁴ Federal efforts to circumvent important permit review processes are currently intensifying, highlighting the need for strong state oversight.

Two additional compressor stations are proposed for Virginia, including the **MVP Boost Swann Compressor Station** in Montgomery County, which would be the largest compressor station by horsepower in the eastern US and affect an environmental justice community.¹⁵ The local government¹⁶ opposes the project due to safety concerns and limits to access by emergency services. The Chesapeake Compressor Station Project received permits earlier this year despite its projected impacts to environmental justice communities.

OPPORTUNITIES

Virginia can build on insights from the problems caused by the Mountain Valley Pipeline to strengthen existing laws and regulations to more fully protect water resources, safeguard public health and safety, and limit the dangers of construction in fragile karst landscapes or seismic zones.

Any new proposals for fossil fuel pipeline build-out, including both interstate and intrastate pipelines, should fully engage and respect the public's views and interests. Unless permitting regulations change, the impacts of new pipeline and compressor station infrastructure are most likely to fall disproportionately on low-income households, communities of color, and rural communities (see *Environmental Justice*, page 131). Increased outreach from state agencies to impacted residents at the start of review processes and during a project's construction would strengthen local participation in those reviews, 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 (see *Preventing New Fossil Fuel Infrastructure*, page 115).

Bonding requirements to ensure appropriate funding or insurance coverage for pipeline construction

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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.

Pollution laws governing water pollution threats from pipeline construction and air pollution controls on compressor stations should be enforced, and companies should be held fully accountable for the impacts of their infrastructure, regardless of project completion or abandonment.

TOP TAKEAWAYS

Without strong oversight, new methane-gas pipelines and compressor stations threaten to damage ecosystems, neighbors' properties, and public health and safety.

Projects disproportionately affect environmental justice communities. Cumulative impacts permitting could be utilized to ensure no community is bearing disproportionate and compounding air quality impacts from existing and proposed pollution sources.

Stronger environmental oversight, bonding and safety requirements, and public participation could lessen harms to the public, natural environments, and burdens on local communities.

ENDNOTES

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