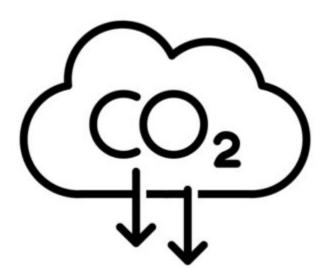
Carbon Dioxide Pipelines: Dangerous and Under-Regulated



Background Information

- Pipeline companies have started proposing massive CO₂ pipeline mileage throughout the Midwest and Gulf Coast regions in the interest of Carbon Capture and Sequestration.
- The buildout, incentivized by the 45Q tax credit expanded in the recent bipartisan infrastructure bill, has a major problem; CO₂ pipelines pose significant safety hazards and are terribly under-regulated.
- CO₂ is an asphyxiant that's heavier than air, and it can travel large distances at lethal concentrations from the pipeline after a rupture.
- CO₂ pipelines are susceptible to ductile fractures, which can, like a zipper, open up and run down a significant length of the pipe, they can release immense amounts of CO₂, hurl large sections of pipe, expel pipe shrapnel, and generate enormous craters.

- Water, notoriously difficult to eliminate from CO₂ pipelines, allows the formation of carbonic acid in the pipeline which has a ferocious appetite for carbon steel.
- The current CO₂ pipeline regulations do not sufficiently address any of the three above risks.
- The U.S. Department's pipeline safety agency PHMSA (Pipeline and Hazardous Materials Safety Administration) regulations have terrifyingly large gaps on carbon dioxide pipelines including having no regulations if the CO₂ is transported as a liquid or a gas, only as a supercritical fluid.
- PHMSA can and should impose stricter safety regulations in order to keep the public safe from future CO₂pipeline plans.

Further Resources

Guide to Public Comment: PHMSA's CO2 Pipeline Safety Public Meeting

Summary for Policymakers

Resumen para legisladores(as) – ¡Ya disponible en Español!

Full Report on CO₂ Pipelines

Media Backgrounder on CO₂ Pipelines

Regulatory and Knowledge Gap Fact Sheet

Press Release on CO₂ Pipelines

- Article <u>The Gassing of Satartia</u>
- Video <u>8" CO2 Pipeline Test Rupture</u>
- Report <u>Congressional Research Service Report on CO2 Pipeline Policy Issues 2009</u>
- Research Paper <u>CO2 Pipeline Material and Safety Considerations</u>