Buckeye Environmental Network
Statewide group based in Columbus, Ohio
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Ohio Legislators
Ohio Statehouse
1 Capitol Square
Columbus, Ohio 43215

Dear Ohio Legislator:

Subject: Letter Regarding Carbon Capture and Storage in Ohio

We are writing to you today regarding the carbon capture and storage projects that are being proposed for Ohio. We ask that you read through this letter thoroughly, as it includes technical information as well as community stories, and this is a very important issue that would impact many Ohioans.

A new push to inject massive, unprecedented volumes of industrial carbon dioxide (CO_2) beneath our homes and communities using carbon capture and sequestration (CCS) poses serious risks to human health and the environment and raises questions about economic viability.

Companies claim they will capture carbon emissions from heavy emitters like power plants and other industrial facilities, then pressurize it, and inject it deep underground. They allege that the carbon dioxide, an asphyxiant, will remain secured underground indefinitely. However, the feasibility of successfully containing these carbon waste streams presents a spectrum of serious risks at not just the final sites of injection, but also in the transportation process. As other communities have learned, the hazardous stakes of an accidental blowout or explosion are just too high.

Technical issues related to CCS

CO_2 needs to be pressurized to 1000 PSI, transforming it into a supercritical fluid, wherein it is then injected into Class VI wells. CO_2 storage has to be monitored indefinitely and can induce earthquakes and cause groundwater to become acidified as CO_2 combines with H_2O to react and form carbonic acid (H_2CO_3). Pipelines can rupture and release concentrated gases at ground level, making it harder to breathe and risking acute incidents of mass community asphyxiation.

CCS has also been proven to be ineffective and noncompetitive at scale, maintaining an 80% failure rate for projects seeking commercialization. Across the US, tens of thousands of miles of carbon dioxide pipelines would need to be built and would cost hundreds of billions of dollars. Carbon dioxide gas must also be purified before entering pipes or it will cause corrosion.

Critically for Ohio, the very geologic formations that have been targeted for carbon injection wells are already overburdened and under immense pressure from approximately 300,000 previously drilled oil and gas wells that have been accumulating on top of each other for more than a century. Considering all the joints, faults and fractures that also exist, **abandoned and improperly plugged wells could act as conduits through which injected carbon could leak or migrate between geologic formations.** If allowed to migrate, pressurized carbon could impact already precarious groundwater supplies, threatening nearby communities and other aspects of the local economy that are reliant on stable sources of groundwater.

Real example of failure of carbon pipeline

The fact is that the risk of catastrophic infrastructural failure has not been taken seriously or properly communicated to the public, leaving communities in the dark around how to prepare in case of an emergency. Five years ago in Satartia, Mississippi, families sitting down for dinner were struck with the sudden, sharp odor of rotten eggs. A green fog had crept over the highway and settled into the valley, seeping into homes and vehicles. Within minutes, people were gasping for air, dazed and trembling with some collapsing in their homes. Vehicles blocked roads with stalled engines, unable to start their ignitions due to the lack of oxygen in the air needed for combustion. Drivers scrambled out onto the asphalt as first responders, hampered by a cloud of toxic gas, raced to the scene. Later it was revealed that a CO_2 pipeline over the hill had ruptured, exposing residents to a dense, odorized cloud of carbon dioxide. Within hours, hundreds of residents were evacuated and dozens were rushed to the hospital. The county's emergency director likened it to "the zombie apocalypse."

Ohio has failed to properly regulate the Class II program

Ohio regulators have no experience permitting and maintaining CO_2 transport and injection wells, let alone knowing how to effectively respond to an emergency situation. In fact, they already have a flawed record of regulating Class II wells which inject hazardous fracking waste deep underground. For 15 years communities in Ohio have been highlighting the mismanagement of the state's Class II injection well program.

In 2022, a group of 29 organizations across the state petitioned[1] the US EPA to revoke regulatory oversight of Class II wells from the Ohio Department of Natural Resources (ODNR). The petition stated: "[the Class II program] endangers underground sources of drinking water, disproportionately impacts low‑income Appalachian Ohioans, and deprives those most impacted by Class II disposal wells of the opportunity to participate in major decisions." We draw upon our activist history because it alerts us to the reality that the CO2 regulatory program under the direction of ODNR has the stark potential to be much worse. Why would Ohioans want a debunked and expensive technology, when the state has already had so many issues handling the waste disposal wells it currently has?

Further documented issues and concerns with CCS

Class VI carbon injection wells have a documented history of being unreliable, ineffective and considering the staggering price tag associated with emergency response and subsequent legal liability, extraordinarily cost prohibitive. Only six Class VI wells are currently in active operation in the US.[2]

We shouldn't have to be guinea pigs for this carbon experiment. The stakes are too high. The health and safety of our families is too important. And this fundamental risk will only be made worse if companies are allowed to use forced pooling to dump CO_2 under people's homes without their approval or off-load the responsibility for their projects to state governments. We are sick and tired of living and dying at the whim of state leadership who prioritize company profits and endanger the people they're meant to serve.

➔ **We shouldn't be held responsible for carbon storage liability.**
Allowing companies to externalize project liability onto taxpayers — it's a classic case of private profit at public expense, especially when you consider that these companies also receive lucrative tax credits for storing CO2 . If companies say their carbon can be stored underground forever, they should be responsible for making sure it stays there. Otherwise, cleaning up leaks and responding to disasters will fall on our shoulders. If liability can be legally transferred after a period of time, what incentive do companies have to not cut corners or use cheaper materials or methods?

➔ **Forced pooling takes away our right to choose.**
Carbon injection companies could try to seize rights to underground "pore space" without landowners' consent. Once companies gain approval from enough landowners

[1]

https://ohiocapitaljournal.com/2022/10/19/alleging-continual-pollution-advocates-ask-u-s-epa-to-take-over-ohio-injection-well-permitting/

[2] https://www.catf.us/classviwellsmap/

(70 percent), they could ask the state to force the remainder to fork over their rights. It's a system that steamrolls the rights of small landowners and puts us all at risk.

We want a future that focuses on communities and benefits local citizens. Carbon injection projects place Ohio families in harm's way and distracts us from beneficial projects that could be more community-centered and economically sound.

Sincerely,

Buckeye Environmental Network
Ohio Brine Task Force
Mid Ohio Valley Climate Action
Concerned Ohio River Residents
SOBE Concerned Citizens of Youngstown, Ohio
Committee for Youngstown Community Bill of Rights
Frackfree Mahoning Valley
Frackfree America National Coalition based in Youngstown, Ohio
TreezPlease of Youngstown, Ohio
Between the Waters
Athens County's Future Action Network
Third Act Ohio