

To: PUC Board

Re: HP24-001 - Summit Carbon Solutions LLC Proposed Carbon Capture Pipeline

PUC Board Members, I respectfully request you DENY all permits to Summit Carbon Solutions for pipeline construction and any other carbon capture infrastructure on SD land.

The goal of Summit Carbon Solutions is to capture carbon from ethanol plants, transport it by pipeline through SD and other states, and store it in the ground, all to reduce emissions and slow the progression of "Global Climate Change."

Everything in this goal is FALSE, and the pipeline is part of an unrealistic, unproven project.

Scientific sources question the effectiveness of carbon capture and point out major flaws in any type of carbon capture. Surprisingly, most of these sources are organizations and scientists who support Global Climate Change. They reject carbon capture and categorize it as a technology which "faces significant challenges and limitations that cast doubt on their feasibility and effectiveness" to reduce carbon emissions.

**1) Carbon capture technology has substantial limitations and will never be a valid way to reduce global CO2 emissions.**

Each ethanol plant with carbon capture technology needs 10-40% more energy (fossil fuel based) to capture carbon, and are 20-30% LESS efficient in their primary production of ethanol. 5-15% of CO2 will still escape, increasing CO2 emissions. CO2 underground storage is unpredictable, and large amounts will leak into the air over time, negating any "capture."

The infrastructure needed for CO2 capture in the facilities, for pipeline transportation, and for CO2 storage, is expensive and requires advanced materials and fossil fuels to manufacture, maintain, and run. The operational expenses are extremely high. Without federal tax credits and other subsidies, it is not sustainable for any company. The taxpayers will be funding Summit and receive no benefits for this dangerous and ineffective technology.

**2) United States CO2 emissions are already highly regulated, and US emissions are decreasing WITHOUT dangerous carbon capture pipelines. CO2 emissions in China and India are essentially unregulated, and are the primary source of Global CO2 emissions.**

In 2023, China and India emitted almost 40% of global CO2, and the US emitted 13%.

Percentages each country contributed to global CO2 emissions from 2000-2023

	US	China	India
2000	23.5%	14%	3.8%
2023	13%↓	31.5%↑	8.1%↑

The US is already decreasing CO2 emissions at an impressive rate. China and India's inaction shows they will not participate in reversing this "global climate crisis." Looking at these numbers we can see how carbon capture, especially by Summit Carbon Solutions in the Midwest of the US, will not make any impactful dent in global CO2 emissions.

**3) The US emissions reduction using carbon capture would be negligible and unmeasurable. Carbon capture projects may INCREASE emissions based on the fossil fuel energy needed for the actual carbon capture procedure, pipeline infrastructure, and long-term storage technology.** From "The World Resource Institute" - discussing Carbon Capture Utilization and Sequestration (CCUS):

"According to recent reports — and depending on the source — there are around 40 operational CCUS projects globally, with about 25 under construction, and more than 300 in some stage of planning. Operational projects are capturing between 42 and 49 million metric tons of CO2 per year (MtCO2/yr). If all projects in development were complete, total CCUS capacity would be around 360 MtCO2/yr, which is around 0.7% of today's global greenhouse gas emissions.

This statistic clearly shows how useless carbon capture is to reduce CO2 emissions. I have no doubt Summit knows these statistics, but hopes we accept their false narrative without question. They are wrong.

**4) Storing CO2 in the ground is unproven, impossible to effectively monitor, and dangerous to human and animal life and the environment.**

Ground storage does not affect SD land (yet), but it is a major flaw in Summit Carbon Solutions' carbon capture project. CO2 storage is very new (about 15 years) which is not long enough to see long-term impact of stored CO2 on the people and land or whether leaks will occur. A scientific paper published in Dec 2024 states CO2 storage hazards include "possibility of CO2 escaping the storage location through faults, fissures, or abandoned wells", "leakage which would raise atmospheric CO2 levels and decrease storage efficacy," and chances that "CO2 will seep into groundwater aquifers and compromise the quality of water."

The CO2 pipeline is part of a technology which is unproven, inefficient at best, and dangerous to humans, animals, and the environment. We must be aware of these facts when dangerous and unproven technologies are brought to our state by companies like Summit Carbon Solutions. They have objectives they will never achieve, and the South Dakota people and land will suffer. Please DENY all pipeline permits to Summit Carbon Solutions.

Thank you for your time.

*Carol A. Vavra*

*1/16/2025*

Carol A. Vavra

██████████  
██████████  
Brookings, SD 57006

*1.8 mi. from  
proposed pipeline*

████████████████████  
████████████████████