From: Kyle Sueltz

Sent: Tuesday, January 7, 2025 8:45 PM

To: PUC-PUC < PUC@state.sd.us >

Subject: [EXT] written comment for HP24-001

Please see attachment

Kyle Sueltz

January 7, 2025

To: South Dakota PUC re: HP24-001

I am extremely concerned about the potential CO2 pipeline being considered throughout SD. My family's land is in the path of this pipeline, and I spend most of my time within a mile of the proposed route and have many concerns not just for my family, but everyone near the proposed route statewide.

## Safety Concerns:

- When meeting with the SCS engineer to discuss the route, I asked if SCS would be adhering to the county setback ordinance of 1500' from a dwelling property line and I was told they will not be following any local ordinances. In reviewing the proposed route through Brown County there are over 20 violations of the ordinance in 35 miles of pipeline. There are several instances of the pipeline being within a few hundred feet of houses and livestock.
- The route takes the pipe within a ½ mile of both urban and rural housing developments and lakes that have concentrated populations.
- Per Summit's website, shutoff valves will be every 20 miles. A 6" line at that length has enough liquid CO2 that will vaporize (using 535:1 expansion ratio) to cover 640 acres (1 square mile) with a 10' tall layer at a 4% concentration, which is the Immediately Dangerous to Life or Health level set by OSHA. A 24" line is 16 times the volume of a 6"- that is 16 square miles that could be affected by a deadly concentration of CO2!
- CO2 is colorless and odorless gas 1.53 times heavier than air so it will always stay at the surface and pool in any low-lying area.
- Atmospheric inversions which happen when a layer of air gets trapped at the surface and will not mix with the air above it occurred 43% of the time in 2023 (per SDSU Groton weather station data) with most inversions lasting 10-12 hours. There is a nearly 50% chance that a plume will not disperse for many hours, making rescue or evacuations difficult.
- Any individuals working or driving through a plume will have no way to escape as their vehicle will stall making escape impossible. The event timeline in the PHMSA report for the Satartia, MS CO2 rupture shows how difficult determining where a plume will travel and how to respond to it. 45 of the 200 residents evacuated required medical attention at hospitals. Many still suffer long term effects from the exposure.

• First responders will require electric ambulances and rescue vehicles, several hours' worth of mobile oxygen supplies for themselves and those they are rescuing. The cost of this equipment, maintenance, buildings, and training will come directly from taxpayers' pockets. In Brown County alone there are 10 volunteer departments that will have to be equipped-this would easily be \$10 million just to get initially equipped along with significant ongoing maintenance costs.

## **Economic Concerns:**

The electrical load required just to compress and refrigerate 18 MMT of CO2 from gas to liquid before putting in the pipeline will be approximately 180 MW (using 100 KWh/ tonCO2 specific power). Additional pumps along the line will require another 10-20 MW bringing the total power demand to 200 MW minimum. To put that into perspective, Basin Electric is building a 580 MW natural gas generator that has taken over 5 years to complete at a cost of over \$800 million. This pipeline would use almost half of the power the generator will produce.

This will directly affect the existing industries in both ag and manufacturing as many companies cannot shut down processes during peak usage and will bear the burden of increased costs or be forced to invest significant capital for on-site power generation.

Agriculture will be greatly affected by load control and increased electric costs offsetting any small gain in grain prices. Current low-carbon programs offer \$0.01 to \$0.05 per bushel, which will not cover the increased energy expenses felt at all levels of ag production.

Cooling systems for the compression and pumping stations will require large volumes of water from rural water systems-stressing an already constrained infrastructure and limiting further development of rural areas.

Per Summit's website, they plan to capture 18 MMT gross, but the actual net amount will be smaller after the power generation CO2 emissions are figured in. In 2023 the total US CO2 emissions were 5300 million tons per the EIA. This project would capture only 0.3% of the total emissions produced which is insignificant to reducing CO2 emissions.

There are several ethanol plants in the state that sell ethanol to low-carbon markets utilizing existing technologies-this pipeline is not necessary for access to these markets. The cash corn price at these plants is the same as other plants in the area not selling into the low-carbon markets which shows that the return to the corn producer will be slim to none.

t the end of the day, this project will put an incredible strain on core infrastructure resources, raising costs for every person and business in the region. Any increased tax revenues will be offset by these increased expenses at all levels. This **PRIVATE** project is trying to exploit the rights and resources of South Dakotans for their own personal gain - please deny this attempted railroading of our citizens!

Kyle Sueltz

Columbia, SD 57433