

RE: Public Comment
HydrocarbonPipeline/2024/HP24-001

TO: South Dakota Public Utilities Commission
500 E. Capitol Ave.
Pierre, So. Dak. 57501

DA: January 15, 2025

PL: HUB Auditorium
Southeast Technical College
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UTILITIES COMMISSION

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Thank you to the Public Utilities Commission (PUC) for the opportunity to comment on the important topic of high pressure carbon dioxide pipelines potentially being installed subsurface on private lands in South Dakota.

My name is Mike Schmidt. My lovely wife (Barb) and I own land and raise crops and livestock in southern Moody County. Over forty years ago we faced a six figure lawsuit by an individual operating a defective snowmobile on the Sioux River that flows thru land that we own and land that we leased. Since that incident we have taken a keen interest in private property rights and water law. Provisions in the United States Constitution and the South Dakota Constitution provide protections of private property rights. Private property rights are the basis of our democracy. They must be protected and must not be taken lightly.

Eminent domain provisions are part of the basis for these protections. They allow “exceptions”, if you will, that permit the use of private property for the public good but also make allowances for just compensation for easements to access private property. Generally citizens accept these “exceptions” for the public good. Also, generally understood, is the concept that when an easement is negotiated and agreed to the grantee of the easement will make abundant effort to provide a significant degree of safety for

the landowner and the general public when installing and exercising the easement for the intended purpose.

The permit application by Summit Carbon Solutions to obtain easements and build a very high pressure carbon dioxide pipeline discusses leak detection but minimal discussion addressing emergency response procedures to address a leak. Try as hard as one might mechanical devices do fail on occasion for a whole host of reasons. Carbon dioxide, in its gaseous state, is a colorless, odorless, tasteless gas. That being the case emergency personnel; be that law enforcement, fire departments, emergency services, and/or related responding individuals; face a relatively unidentifiable and dangerous situation should they be called to the site of a carbon dioxide leak. Providing specialized training and response equipment for these various emergency response personnel must be a significant condition should any sort of permit for a carbon dioxide pipeline be granted by the PUC. Somebody needs to be responsible for the cost of this equipment and training the response personnel.

The process of liquifying carbon dioxide for pipeline transport involves quite a number of significant power hungry compressing equipment facilities all along the pipeline that require cooling components. The cooling process for these facilities demands a very significant volume of water. The water is to be supplied from multiple surface and subsurface sources. After using the water for a coolant it is planned to be released into surface waters in the state.

South Dakota is a prior appropriation water law state. Water is a very finite commodity in the western United States, including South Dakota. The water belongs to the state. Any water use more than that needed for domestic use requires a permit from the South Dakota Department of Agriculture and Natural Resources (DANR) that allocates a defined amount of water for a specific beneficial use on a seniority basis. Barb and I hold an irrigation permit. DANR monitors our use of water allowed thru the permit and rightfully so. Shutoff valves on center pivot end guns are utilized to limit the waste of water that might otherwise be oversprayed onto the adjacent roads. If it is necessary to be concerned about a limited amount of overspray on roads from irrigation systems I am not sure that releasing large volumes of coolant water into surface waters is a good and beneficial use of water in South Dakota.

South Dakota is an agricultural state. We raise corn, wheat, soybeans, grass, timber, and other such crops. These crops convert carbon dioxide into oxygen. Greenhouse managers often enrich the atmosphere in the greenhouse with supplemental carbon dioxide to enhance plant growth. The reasoning to sequester carbon dioxide underground in a state that grows a multitude of crops that utilize carbon dioxide escapes me. We utilize carbon dioxide for plant growth.

When the Alaskan pipeline was being designed engineers faced the problem of the warm pipeline melting the permafrost and damaging the frozen landscape. This proposed carbon dioxide pipeline raises a similar engineering problem. Carbon dioxide pumped thru the pipeline is at an elevated temperature also. It seems likely that heat will radiate from the buried pipeline and will tend to dry out the soil and adversely affect the crops growing above the buried pipeline during the summer. And during the winter there will likely be soft spots in otherwise frozen roads and other such places. Engineers for the Alaskan pipeline dealt with the problem by elevating the pipeline above the ground. I am NOT advocating that the engineers elevate this pipeline but I am suggesting that this heat problem probably needs to be addressed also.

Looking at the big picture here in the United States the proposed problem of concentrated greenhouse gases is most severe along both coasts. Addressing this coastal concentration problem by burying carbon dioxide in the middle of the country because of its point source availability is similar to addressing a surplus waters issue in the everglades by building a drainage canal system in the Arizona desert because it is easier to construct in the dry desert. If it were not for federal tax credit dollars this whole carbon dioxide pipeline issue would cease to exist.

I thank the PUC for the opportunity for the public to express concerns that this permit application presents.

Michael L. Schmidt